

19971231.qrp v00_n956.qrs.971231

Date: Wed, 31 Dec 1997 19:03:39 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 956

QRP-L Digest 956

Topics covered in this issue include:

- 1) [34051] Re: K1MG's calculations
by Monte Stark <ku7y@sage.dri.edu>
- 2) [34052] RE: MRX-40 Mini Rcvr Kits
by "John L. \"Jake\" Carter" <jakecart@ix.netcom.com>
- 3) [34053] Re: CW
by Ed Tanton <n4xy@bellsouth.net>
- 4) [34054] Re: K1MG's calculations
by "Dan L. Evans" <dlevans@hsonline.net>
- 5) [34055] Thanks Preston/ first N-T Fox
by "JEFFREY MICHAEL POULIN" <jpoulin@erols.com>
- 6) [34056] K1MG's calculations: analysis
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 7) [34057] K1MG's calculations: mi/watt
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 8) [34058] Looking for Ten Tec Mobile ant...
by Goemans <jgoemans@facstaff.wisc.edu>
- 9) [34059] Re: K1MG's calculations: analysis
by "Michael Connor" <mikec@primenet.com>
- 10) [34060] Beacon (?) question
by Joel Malman <malman@BBN.COM>
- 11) [34061] More "Mongrel"
by sigcom@juno.com (Stephen M Smith)
- 12) [34062] VN66AFD part availability
by WU0L <WU0L@aol.com>
- 13) [34063] Re: CW
by Chuck Carpenter <w5usj@webwide.net>
- 14) [34064] my turn to dance
by Joel Malman <malman@BBN.COM>
- 15) [34065] Re: K1MG's calcs & UHF
by ddonald@sprintmail.com
- 16) [34066] Pixie/40-9er test
by "KA5T Larry Wise" <lewise@inetport.com>
- 17) [34067] RE: Preston - N/T Fox
by "Robert H. Sorge" <rsorge@phoenix.net>
- 18) [34068] Re: TT Argosy 505 de AL7FS
by "Jim (AL7FS), Nancy (KL7NY), Juliann (WL7MP) & Issei"
<larsennc@alaska.net>

- 19) [34069] electronic parts suppliers
by "duane" <duane@flinet.com>
- 20) [34070] 49r vs TS850
by flydnq7x@primenet.com (Floyd Smithberg)
- 21) [34071] Mobile Antenna Solutions
by mwattcpa@earthlink.net (Marty Watt)
- 22) [34072] Re: CW (or: My CW Story)
by ori@juno.com (Ori K Mizrahi-Shalom)
- 23) [34073] Trade Icom 730 for QRP stuff
by "Kelly Ellison" <kelman@dialnet.net>
- 24) [34074] Emtech FS
by "Kenneth W. Evans" <w4du@bellsouth.net>
- 25) [34075] HW-16ers Unite for SKN!
by Bill Todd <bill@techline.com>
- 26) [34076] SMT parts ID
by "KA5T Larry Wise" <lewise@inetport.com>
- 27) [34077] Fox Results 30 Dec W03B
by "Bob White" <bobwhite@accesscom.com>
- 28) [34078] Re: Fox Results 30 Dec W03B
by Roger Hightower <n7kt@earthlink.net>
- 29) [34079] January QRP Quarterly on the way
by Mike Czuhajewski <wa8mcq@u1.abs.net>
- 30) [34080] Re: Pixie/40-9er test
by "Harvey D. D. Hetland" <n6mm@earthlink.net>
- 31) [34081] Rx Mixers Query
by John Anthony Reynolds <D2250077@infotrade.co.uk>
- 32) [34082] WQ4RP Pixie/49er log...
by Randy Hargenrader <randyh@harksystems.com>
- 33) [34083] Re: K1MG's calculations: mi/watt
by Steven Weber <kd1jv@moose.ncia.net>
- 34) [34084] 1/2-wave dipole --- 50ohm feed
by "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
- 35) [34085] Re: Dark and Early on 40m....
by KE1HO <KE1HO@aol.com>
- 36) [34086] Re: 1/2-wave dipole --- 50ohm feed
by n3fel@juno.com (Howard D Rubin)
- 37) [34087] CT1ETT will be in Orlando next January
by Rogerio Gonzaga <gonzaga@med.up.pt>
- 38) [34088] Pixie/49'er and SNOW
by nq2rp@juno.com (B/BAMS Club Station)
- 39) [34089] Trajajando en...
by "Juan Antonio Lopez Delgado, EA8QJ, EA-QRP # 196" <jalopezd@arrakis.es>
- 40) [34090] Joel Malman <malman@BBN.COM>: Beacon (?) question
by nq2rp@juno.com (B/BAMS Club Station)
- 41) [34091] Hangar 9 Charger Update
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 42) [34092] Re: Fox Results 30 Dec W03B
by Chris Cartwright <ccart@dns.vidtel.com>

43) [34093] Re: CW (or: My CW Story)
by mwattcpa@earthlink.net (Marty Watt)

44) [34094] Re: my turn to dance
by adams@chuck.dallas.sgi.com (Chuck Adams)

45) [34095] Re: Rx Mixers Query
by Chris Trask <ctrask@primenet.com>

46) [34096] Re: Pixie/49'er and SNOW
by Chris Cartwright <ccart@dns.vidtel.com>

47) [34097] Re: my turn to dance
by cooper@gmpvt.com (Tom Cooper)

48) [34098] 49r vs TS850
by "Wilford D. Lindsey" <70511.3041@compuserve.com>

49) [34099] Re: Pixie/40-9er test
by "Wilford D. Lindsey" <70511.3041@compuserve.com>

50) [34100] WQ4RP Pixie/49er log...
by "Wilford D. Lindsey" <70511.3041@compuserve.com>

51) [34101] my turn to dance
by "Wilford D. Lindsey" <70511.3041@compuserve.com>

52) [34102] Pixie/40-9er test
by "Wilford D. Lindsey" <70511.3041@compuserve.com>

53) [34103] Rainbow tuner lives
by TonyDrumm@ibm.net (Tony Drumm)

54) [34104] FOX Year End Scores
by adams@chuck.dallas.sgi.com (Chuck Adams)

55) [34105] Re: SPRAT and More Received\!
by Zack Lau <zlau@arrl.org>

56) [34106] The Fuzz
by minie@ed11a.msfc.nasa.gov (minie)

57) [34107] 3K00G1D {Spread Spectrum & QRP}
by wa5whn@juno.com

58) [34108] SKN
by Shepherd <Shepherd@aol.com>

59) [34109] Straight Key Night
by Bob Tellefsen-CNSE97 <Bob_Tellefsen-CNSE97@email.mot.com>

60) [34110] 5 W CW vs. 100 W SSB
by VE3JC John <jbcumming@wwdc.com>

61) [34111] TenTec
by David Heintzleman <bchurch@megavision.com>

62) [34112] Re: Rx Mixers Query
by Leon Heller <leon@lfheller.demon.co.uk>

63) [34113] Re: K1MG's calculations: mi/watt
by Monte Stark <ku7y@sage.dri.edu>

64) [34114] web page
by "duane" <duane@flinet.com>

65) [34115] FS:Norcal 40a QRP Rig
by "Wilford D. Lindsey" <70511.3041@compuserve.com>

66) [34116] FS:QRP Gear
by "Wilford D. Lindsey" <70511.3041@compuserve.com>

- 67) [34117] Re: Rx Mixers Query
by Stanley Wilson <microres@crl.com>
- 68) [34118] RE: Local Enforcement of FCC Rules
by "Bob Follett" <bfollett@ditell.com>
- 69) [34119] Re: 3K00G1D {Spread Spectrum & QRP}
by Monte Stark <ku7y@sage.dri.edu>
- 70) [34120] Re: Rx Mixers Query
by Steven Weber <kd1jv@moose.ncia.net>
- 71) [34121] Happy New Year
by af852@rgfn.epcc.Edu (William R Colbert)
- 72) [34122] MI Contest
by Monte Stark <ku7y@sage.dri.edu>
- 73) [34123] Re: K1MG's calcs & UHF
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 74) [34124] Re: 3K00G1D {Spread Spectrum & QRP}
by "Earl S. Mead" <k6esmead@pacbell.net>
- 75) [34125] Inverted V effect on dipoles
by "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
- 76) [34126] Re: 3K00G1D {Spread Spectrum & QRP}
by "George T. Baker" <w5yr@swbell.net>
- 77) [34127] Re:obQRP: portable, wireless....
by Randy Hargenrader <randyh@harksystems.com>
- 78) [34128] Re: K1MG's calculations: mi/watt
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 79) [34129] Re: Pixie/40-9er test
by Joe Gervais <vole@primenet.com>
- 80) [34130] Re: 1/2-wave dipole --- 50ohm feed
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 81) [34131] Re: 1/2-wave dipole --- 50ohm feed
by wp4jxd@prtc.net (wp4jxd)
- 82) [34132] How low can you go?
by "Chuck Smith" <csmith@ionet.net>
- 83) [34133] Re: my turn to dance
by Joe Gervais <vole@primenet.com>
- 84) [34134] Re: TenTec
by "kc1di/dave" <elim@ime.net>
- 85) [34135] Re: How low can you go?
by Kory Hamzeh <kory@avatar.com>
- 86) [34136] The propagation is opening!
by "Juan Antonio Lopez Delgado, EA8QJ, EA-QRP # 196" <jalopezd@arrakis.es>
- 87) [34137] Some DX on 15 M
by W2MY & W2MBY <n2mnn@spacegate.com>
- 88) [34138] Microphone question
by Stanley Wilson <microres@crl.com>
- 89) [34139] Re: 5 W CW vs. 100 W SSB
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 90) [34140] SKN
by ab5uacw@juno.com (Clifton W Sikes)

- 91) [34141] step motors & Ledex
by "Junius B. Fox" <w5hir@mail.phoenix.net>
- 92) [34142] FS: OHR400
by OJ Quarles <k1oj@swbell.net>
- 93) [34143] Re: Inverted V effect on dipoles
by "George T. Baker" <w5yr@swbell.net>
- 94) [34144] Re: 5 W CW vs. 100 W SSB
by olyellr@iglou.com
- 95) [34145] Re: Some DX on 15 M
by Joe Gervais <vole@primenet.com>
- 96) [34146] Re: How low can you go?
by Jess Gypin <jessqrp@concentric.net>
- 97) [34147] RE: Some DX on 15 M
by Kevin Muenzler <wb5rue@stic.net>
- 98) [34148] Change of email address
by "Charles L. Stackhouse" <cstack@cyberhighway.net>
- 99) [34149] Re: step motors & Ledex
by "S. Lee" <slee@u.washington.edu>
- 100) [34150] Note re MFJ Paddles FS
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 101) [34151] Re: QRP-L digest 955
by "George F. Allgood" <k4pym@carol.net>
- 102) [34152] RE: obQRP: portable, wireless....
by "LLOYD DEEM" <WH6CDU@classic.msn.com>
- 103) [34153] RE: 5 W CW vs. 100 W SSB
by "LLOYD DEEM" <WH6CDU@classic.msn.com>
- 104) [34154] Cascade kit, with KC2 and Buzznot, for sale.
by Doug Faunt N6TQS +1-510-655-8604 <faunt@netcom.com>
- 105) [34155] SGC-2020 News
by Tim Ahrens <tahrens@inetport.com>
- 106) [34156] Re: Knightlite SMiTe, Pixie/49'er and SNOW
by "Bob Kellogg" <ae4ic@nr.infi.net>
- 107) [34157] FOX: NOGLM report
by "Buck, Preston D" <BuckPD@corning.com>
- 108) [34158] Re: 1/2-wave dipole --- 50ohm feed
by Gardner / Maguire <bagardn@ibm.net>
- 109) [34159] FS: T-T/MFJ Tuners
by k7sz@juno.com
- 110) [34160] Re: Rx Mixers Query
by John Levreault <jlevro@shore.net>
- 111) [34161] CD, SPRAT Group buy update
by "Bill Kelsey - N8ET - Kanga US" <kanga@mail.bright.net>
- 112) [34162] CQC Summer QSO Party Results
by "Marshall Emm" <mgemm@ntechnologies.com>
- 113) [34163] MFJ CWF-3 Schematic Wanted
by "L. Jeffrey Hetherington" <jhetheri@freenet.npiec.on.ca>
- 114) [34164] Re: Rx Mixers Query
by Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>

- 115) [34165] Re: Rx Mixers Query
by K5BDZ <K5BDZ@aol.com>
116) [34166] "QRP: what does it mean to the CW Op?"
by VE3JC John <jbcumming@wwdc.com>

Date: Tue, 30 Dec 1997 16:13:46 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: mgipe@reliablemeters.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [34051] Re: K1MG's calculations
Message-ID: <34A98E3A.40E1@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Michael A. Gipe wrote:

>
> Sorry Chuck. I guess I wasn't clear. The entire QSO was conducted with
> just the dummy load connected. No antenna nowhere nohow.
>
> Antennas? We don't need no stinkin antennas.

Ah, then the dummy load was "the antenna". Not a very good one, but
still a "conductor by which electromagnetic waves are transmitted or
received". That quoted from the little Random House dictionary here on
the desk!

So not only is it not good for zero watts output, it counts as the full
3w you were putting into it!

But it's a nice try.....lets see now, if I figure the area of the dummy
load with a very large heat sink, I should be able to get my yagi to
operate on zero power
while I'm running a full KW!

My Force12 = 50 ohms and has a bunch of alumnium for the heat
sink....hmmmmmm, I wonder if Chuck will buy this during the MI
contest.....

--
73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Tue, 30 Dec 1997 19:32:20 -0500
From: "John L. \"Jake\" Carter" <jakecart@ix.netcom.com>
To: <qrp-1@Lehigh.EDU>
Subject: [34052] RE: MRX-40 Mini Rcvr Kits
Message-ID: <199712310032.SAA22706@dfw-ix12.ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

I can attest to the quality and performance of the MRX-40 kits. I mixed one in with my Pixie -- on 40m the SW Broadcast stations are too much for the Pixie. :-(

I still hear some SW BC, and strong amrad stations, but the MRX-40 allows me to change the pitch of the signals so I can focus on the one I want. Seems to work OK -- in the past 3 1/2 weeks I've made 42 QSOs in 13 states and 2 provinces -- all with the MRX-40 on receive. Even worked a couple contests on this setup :-)

Another good thing about a receiver kit -- you can tell if it works by plugging in a battery, antenna, phones and turning it on. Kind of an instant gratification kind of thing. That was great for me -- a newbie to home built gear.

72/73 and Happy New Year,

Jake [N4UY] Vienna, VA (Washington DC suburbs)

QRP-L #821, G-QRP #9557, AK/QRP #175, CQrp #46,
NJ-QRP #74, NorCal#1457, ARCI #9392, FISTS #3450

WAS QRP W/C 49/47 (need HI)
WAS QRPp W/C 12/9 (200 milliwatts on a Pixie II / MRX-40 / Tick Keyer combo)
DXCC-Pixie W/C 002/002

"...the harder the conflict, the more glorious the triumph. That which we attain too cheap, we esteem too lightly." Thomas Paine, 12/23/1776

Date: Tue, 30 Dec 1997 19:36:04 -0500
From: Ed Tanton <n4xy@bellsouth.net>

To: elim@ime.net
Cc: "Low Power Amateur Radio Discussion" <grp-l@Lehigh.EDU>
Subject: [34053] Re: CW
Message-ID: <3.0.1.32.19971230193604.00b7a3c0@mail.atl.bellsouth.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Dave... at last count I was over 125 countries at 5W, with admittedly an old tri-band beam, but otherwise mainly a G5RV... and there was lots of 'otherwise'... you can CERTAINLY work LOTS of US and DX w/o spending \$500.01. And indeed I do know what you mean... I was 15 (April 1961) when I got my Novice license, and the best I could do was to 'make' time... staying up a while after homework and weekend dates; but better: getting up at 5 AM or so and working what I could (I'll never forget the 1st REALLY good one, Tasmania, on 40M.) I worked after school, and did most of the usual stuff... but ham radio was always a part of it-and still is. You need any parts, or whatever, let me know. I have a lot of things like that, from tubes to surface mount stuff. Feel free to ask.

73

Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX

INTERESTS:	QRP	BoatAnchors	Test Equipment	Photography
CW: 99.9%		Mercury Paddle # 0214		QRP to 150W: 95%

"Think you can, think you can't: either way you're right!" Henry Ford

Date: Sat, 27 Dec 1997 09:11:45 -0500
From: "Dan L. Evans" <dlevans@hsonline.net>
To: qrp-l@Lehigh.EDU
Subject: [34054] Re: K1MG's calculations
Message-ID: <3.0.1.16.19971227091145.2d576f14@mail.hsonline.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

```
>lets see now, if I figure the area of the dummy
>load with a very large heat sink, I should be able to get my yagi to
>operate on zero power
>while I'm running a full KW!
>
>--
```


>73, Ron, KU7Y
>
>NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
>QRP QRCI #8829----NorCal #330----QRP-L #17-----ARS #49
>AR QRP #150-----DM09cg-----New Washoe City, NV

Seems like most of my antennas are dummy loads, at least functionally....

72/73
Dan L. Evans [N9RLA]
72/73 from...EM78
QRP MOBILE CONTESTOR!!!
CQ_DE_dlevans@hsonline.net

Remove the cq_de_ to email me, I hate SPAM!

Date: Tue, 30 Dec 1997 20:34:22 -0500
From: "JEFFREY MICHAEL POULIN" <jpoulin@erols.com>
To: <qrp-l@Lehigh.EDU>
Subject: [34055] Thanks Preston/ first N-T Fox
Message-ID: <199712310132.UAA07655@smtp2.erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

FINALLY!!! After trying for a year, I heard a fox. And he heard me.
Amazing.

I had a few minutes, so I thought I'd give a fox another try, doomed to failure. Lo and behold! There was Preston calling CQ FOX on 7.141.8. 5 watts to 5 watts from Northern VA to NC. Not a record distance but satisfying all the same. I even got a 599 report back from Preston. The time was about 0040 UTC as best I can remember (I was so excited I forgot to write it down immediately). The QRM killed me after the first exchange so I hope he got everything. I guess Christmas really is the season of miracles.

Thanks to Preston for his efforts. The year ends on a high point for me.

Jeff/KF4JSV QRP-L # 743

Date: Tue, 30 Dec 1997 17:43:03 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "QRP-L list server" <qrp-l@Lehigh.EDU>
Subject: [34056] K1MG's calculations: analysis
Message-ID: <199712310132.TAA00947@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

This is an opportunity for learning.

First, we learn that dummy loads DO radiate, and that you can communicate that way.

Let's look at some calculations to see how this might be possible.

In the normal case, W03B would be transmitting with 5 watts (+37dBm) to his Gap Titan antenna. I would be receiving him on my Gap Titan and Kenwood transceiver. What is the path loss between his transmitter and my receiver? Well, terrestrial path loss is a difficult value to calculate. At UHF (like cell phones), the computations are pretty nasty. The numbers show that the signal drops over distance anywhere between r^{-2} to r^{-5} , depending on lots of variables. (In other words, somewhere between the 'one over the square of the distance' for free space, and 'one over the fifth power of the distance' -- quite a variation.) I have no idea how to predict the path loss at HF, though I'm sure that there are a few broadcast engineers here who would know how. However, I do know how much power Bob generated, and I do have an S-meter on my receiver. Assuming that my S-meter is properly calibrated (ha!) we can figure the normal path loss by experiment.

I made this measurement just before my fox QSO with Bob, and found that with my Gap Titan antenna, he hit my receiver at S9+50dB. With S9 defined as 50 uV in a 50 ohm system, S9+50dB calculates out to 5 uW, or -23 dBm -- a pretty hefty signal at the receiver. At the transmitter end, he was generating 5 watts, or +37 dBm. Subtract the two for a path loss of 60 dBm.

Now, RF is a difficult thing to contain. It doesn't need any carrier to transport it (like ether); and it moves at the speed of light. It can also convert itself between electromagnetic waves and electrical currents as needed. That's how antennas work. How well can we contain it? In a well shielded attenuator, we can practically achieve about 20 dB attenuation in a single shielded box. Any more than that, and the accuracy goes bad due to the RF jumping across the box. What about a well-designed dummy load.

I used a lab-grade 50 ohm UHF termination to hunt the fox last night. Assuming a well designed station, perhaps we could get about 100 dB attenuation from the transmitter output to the air? That's another way of saying that a dummy load is a very inefficient radiator. Let's plug that into the system analysis.

Add the 100 dB attenuation in the dummy load to the measured path loss of 60 dB to get the new path loss of 160 dB. What signal level should we expect to see at our receivers? +37 dBm (5 watts) less 160 dB path loss yields a received power of -123 dBm, which, at my 50 ohm receiver front end, is about .16 uV. At room temperature, the best you can achieve at normal bandwidths is around -144 dBm due to inherent thermal noise. Most ham receivers are not quite that good, but they should come within about 10 dB of that value. But -123 dBm is quite a bit better than that, so we should be able to hear the signal with solid copy. Another way of looking at it is that S0 on the S meter would be 0.1uV, so we should be able to communicate even though the S meter doesn't move.

What was the difference on my S meter when I switched from the Gap antenna to the dummy load? Bob's signal went from S9+50dB to S0 (no indication on the meter), and he was solid copy, but not overpowering. Just about what I would expect from a dummy load with 100 dB attenuation of the radiated signal.

The path loss works the same in the other direction, so my signal at his QTH would also be about 0.16uV.

QRP at work. This nerd stuff is fascinating, eh?

Mike K1MG

Date: Tue, 30 Dec 1997 18:00:35 -0800
From: "Michael A. Gipe" <mgipe@reliablemeters.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [34057] K1MG's calculations: mi/watt
Message-ID: <199712310150.TAA01430@multi13.netcomi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

To continue:

At 5 watts (+37 dBm), less 100 db of attenuation, yielding an effective transmit power of -63 dBm (-93 dBW or 500 picowatts), the miles per watt

calculation gives:

$3/500 \times 10^{-12}$ or 6000 million miles per watt.

How could this be possible? The QSO was so easy.

The answer is that the miles per watt award figure of merit does not take into consideration the way that RF propagates. It will always be easier to achieve high mi/w numbers with low power and short distances than with longer distances.

In free space, the power goes down by the square of the distance, so that doubling the power only gets you 1.4 times as far.

On the earth, the ratio could be slightly better or much, much worse (like r^{-5}), in which case you would need to raise your power 32 times to get twice as far.

Another way of looking at this is that you could drop your power to a thirtieth of what it was and still communicate more than half as far away. QRP works pretty well!

Let's see if it works on Wednesday's fox! And no, this dummy isn't going to try it with a dummy load! -- but you can!

Mike K1MG

Didn't have time to double check my numbers. Hope they are OK. I'm sure you'll let me know!

Date: Tue, 30 Dec 1997 20:20:48 -0600
From: Goemans <jgoemans@facstaff.wisc.edu>
To: qrp-1@Lehigh.EDU
Subject: [34058] Looking for Ten Tec Mobile ant...
Message-ID: <199712310218.UAA68690@mail1.doit.wisc.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Greetings, all.

With all this discussion of HF mobile, thought I would try again...
I need a 30 mtr Ten Tec mobile whip ant to complete my set.
Please scour the garage, shack, local hamfest for me! Too

bad they are not available any more from Ten Tec (except for 10 I think).

72, Paul

Paul R Goemans WA9PWP
1508 Sundt Lane
Stoughton, Wi. 53589-1069 608-877-4151
QRP ARCI 7291 NorCal 1226 QRP-L 127 FISTS 2153 G QRP 9879

Date: Tue, 30 Dec 1997 20:14:51 -0700
From: "Michael Connor" <mikec@primenet.com>
To: <mgipe@reliablemeters.com>
Cc: <qrp-l@Lehigh.EDU>
Subject: [34059] Re: K1MG's calculations: analysis
Message-ID: <01bd159a\$41d88e20\$0427f5cc@nathan.phx.primenet.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Mike,

>QRP at work. This nerd stuff is fascinating, eh?

Fascinating, yes. Informative as well. Thanks for sharing it.
I love that kinda stuff....:-)

Mike
NQ7K
AZ ScQRPions

Date: Tue, 30 Dec 97 22:20:36 EST
From: Joel Malman <malman@BBN.COM>
To: qrp-l@Lehigh.EDU
Cc: wa1qvm@BBN.COM

Subject: [34060] Beacon (?) question
Message-ID: <199712310320.WAA12264@nss4.cc.Lehigh.EDU>

Folks,

While not really QRP -- but involves a 'near' QRP calling frequency...

Does anyone know what the beacon (?) on 3685.2 is all about? Note that the KnightLites calling frequency is 3686.4 ... Up here in New England the beacon is quite strong, a consistent 589 at night. I suspect the TX is in the New England or New York area. I've heard it every night during the Pixie/49'er contest. So if you want to try to hear it, try 0100-0300z or even latter. As I write this at 12/31/97 0315z the beacon(?) is very strong with peaks of S9.

Here is a transcript of the text. It is sent at about 25 wpm.

VVV VVV VVV de SXA/G/29/39 SXA/G/29/39 SXA/G/29/39 [5 sec pause]
K13A/G K13A/G K13A/G

Then message repeats after about 2 seconds. Anyone have a clue?

/joel wa1qvm wa1qvm@bbn.com (QTH: Concord, Massachusetts)

Date: Tue, 30 Dec 1997 22:34:30 EST
From: sigcom@juno.com (Stephen M Smith)
To: qrp-l@Lehigh.EDU
Subject: [34061] More "Mongrel"
Message-ID: <19971230.193327.8327.2.sigcom@juno.com>

Group,

"Mongrel" = Pixied 2 clone built only from parts from Dan's Small Parts 5 pound parts grab bag.

Well, I futzed with the output network and managed to get 250 mW output on 3.6864 (Thanks for the crystals, guys). So I sez to myself "Self, what about 40 meters?" I pulled out a 7.040 crystal from one of my 2 un-built 40-9er kits (I can "hear" the drooling) and removed the padding capacitors from the pi net and changed the inductor to 1.5 uH from 2.7 uH (1.5 choke -not- from Dan's bag). 200 mW power output on 40, cool. Of course I couldn't leave well enough alone, I just -had- to make an inductor from the Dan's pile. Chopped up a ferrite bead of unknown spec's. (probably way too much permeability) and wound on wire until I got around 1.5 uH (just guessing, don't have my LC IIB yet). Managed to

get the power up to 150 mW and then things got real squirrely. The power would start at 150 mW, then drop to 100 mW, then after keying down for 15 or 20 seconds, would slowly rise back to 150 mW but with some kind of weird warbling tone, I'm guessing some kind of parasitic. What fun! Hope I get this thing on the air some day.

I was hoping to have it tamed in time for the Pixie/40-9er test this week, but I spent too much time torturing it. Oh, well..... sigh.

Have fun in the contest.

73.....Steve, WB6TNL

Date: Tue, 30 Dec 1997 22:38:14 EST
From: WU0L <WU0L@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [34062] VN66AFD part availability
Message-ID: <10e1d71e.34a9be28@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Does anyone know where I can buy some VN66AFD power FETs like GW6ELR uses in his GQ2000 CW transciever project in the autumn "SPART"?

73 WU0L Mark

Date: Tue, 30 Dec 1997 21:52:27 -0600
From: Chuck Carpenter <w5usj@webwide.net>
To: qrp-1@Lehigh.EDU
Subject: [34063] Re: CW
Message-ID: <3.0.1.32.19971230215227.00695848@mail.webwide.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Josh and all,

Lot's of good advice about learning the code and not going brain-dead.

Also, there are a great many ops now that have absolutely lousy fists. Very hard to copy some of them.

Learn to send good code too. I used to find out what text W1AW was sending for practice runs. I haven't listened recently but I think they still announce their source of material.

Practice sending the text along with them; guaranteed to help you develop your sending skills. You could do this with tape or computer-generated code too.

72/73

Chuck, W5USJ

Rains County (pop 6900), TX - EM22cv

ARCI # 5422, QRP-L # 1306, FISTS # 3984

Date: Tue, 30 Dec 97 22:55:47 EST
From: Joel Malman <malman@BBN.COM>
To: qrp-l@Lehigh.EDU
Subject: [34064] my turn to dance
Message-ID: <199712310356.WAA116522@nss4.cc.Lehigh.EDU>

Folks,

I was about to turn off the rig for the night (it was about 0330z here and I have to go to work tomorrow) -- but decided to give 30 meters one last check.. Well, 3B8CF (Mauritius) is calling CQ and casually working stations. I wait my turn. Hummm, it's quite, I send (err, sneak in) my call (once). Bingo, got him on the first try. Thanks, Ron, for the neat hint ... it works.

He is a solid 579 here and I send him a 579 also. In the exchange I send "579 MA QRP ..." and then he asks: "PWR?" ... it was neat. Just had to dance around the shack after he says "4w sounds gud".

Ahhh, 4 watts, a dipole at 40 foot ... QRP heaven. 72 to all and gn.

/joel wa1qvm wa1qvm@bbn.com (QTH: Concord, Massachusetts)

Date: Tue, 30 Dec 1997 21:56:50 +0000
From: ddonald@sprintmail.com
To: qrp-l@Lehigh.EDU

Subject: [34065] Re: K1MG's calcs & UHF
Message-ID: <199712310358.TAA05429@mailgate22>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Well, terrestrial path loss is a difficult value to calculate.
> At UHF (like cell phones), the computations are pretty nasty. The numbers
> show that the signal drops over distance anywhere between r^{-2} to r^{-5} ,
> depending on lots of variables.

Actually we have a good idea how to make educated guesses. The average pathloss is around 40 db/decade. That is if you have a -50 dbm at 1 mile you would have -90dbm at 10 miles. This figure works in the suburbia. If the air is dry like denver its around 20 db/decade which makes my fellow RF engineers really work at reusing frequencies there (compared to Minneapolis).

I have work a 440 repeater with a 60 watt mobile into a dummy load that was 25 miles away at 400 ft! Cutting your power in half really does not effect a signal much, its only -3db. And hay, "Whats a db among friends".

~~~~~  
Dave Donaldson, WB7DRU, St. Paul MN  
Minnesota QRP Society, NWQRP, NQRP, QRP-L  
<http://www.qsl.net/wb7dru>

-----  
Date: Wed, 31 Dec 97 03:58:02  
From: "KA5T Larry Wise" <lewise@inetport.com>  
To: "qrp" <qrp-l@Lehigh.EDU>  
Subject: [34066] Pixie/40-9er test  
Message-ID: <199712310359.VAA02226@admin.inetport.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Well Finally got a Pixie contact tonight...NQ7RP

Also got 2 other club stations:  
NF2AR/C  
WQ4RP/49

and, worked N6MM and W5VB0

Lots of activity on the band....

Larry  
KA5T

-----  
Date: Tue, 30 Dec 97 23:11:44 PST  
From: "Robert H. Sorge" <rsorge@phoenix.net>  
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [34067] RE: Preston - N/T Fox  
Message-ID: <Chameleon.971230231515.rsorge@phoenix.net.phoenix.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; CHARSET=ISO-8859-1

Hmmmm. Fox not heard tonight in Deer Park, Texas. Did any other Texans have propagation from NC?  
Bob - KC5FMZ

--- On Tue, 30 Dec 1997 20:34:22 -0500 JEFFREY MICHAEL POULIN <jpoulin@erols.com> wrote:  
FINALLY!!! After trying for a year, I heard a fox. And he heard me.  
Amazing.

I had a few minutes, so I thought I'd give a fox another try, doomed to failure. Lo and behold! There was Preston calling CQ FOX on 7.141.8. 5 watts to 5 watts from Northern VA to NC. N

Jeff/KF4JSV QRP-L # 743

-----End of Original Message-----

-----  
Name: Robert H. Sorge - KC5FMZ QRP-L#910,NORCAL#793,ARCI#96033  
E-mail: rsorge@phoenix.net  
Date: 12/30/97  
Time: 11:11:44 PM  
-----

-----  
Date: Tue, 30 Dec 1997 18:51:28 -0900  
From: "Jim (AL7FS), Nancy (KL7NY), Juliann (WL7MP) & Issei" <larsennnc@alaska.net>  
To: bkassel@dancris.com

Cc: qrp-1@Lehigh.EDU  
Subject: [34068] Re: TT Argosy 505 de AL7FS  
Message-ID: <34A9C140.1D38@alaska.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Brian Kassel wrote:

> Jim: Oh, I almost forgot, don't mean at all to bug ya, but I was > wondering if  
you have sold the Broken Argonaut yet?

For all who inquired, I have a tentative buyer from Europe. I am trying  
to get the rig back from a fellow ham who was going to try to fix it but  
never got around to it. Then I can weigh it and get an estimated  
shipping cost to Europe. If all is still well, yes, Brian, the rig is  
sold. I am keeping a list and if the first deal falls through, I will  
let the number 2 offeror know.

73, Jim, AL7FS

--

Jim Larsen  
Acupressure Anchorage  
Anchorage, Alaska

-----  
Date: Tue, 30 Dec 1997 22:52:40 -0500  
From: "duane" <duane@flinet.com>  
To: "qrp-1 group" <QRP-L@Lehigh.EDU>  
Subject: [34069] electronic parts suppliers  
Message-ID: <01bd159f\$8ad462c0\$631a0ed0@ab4be.earthlink.net>  
MIME-Version: 1.0  
Content-Type: multipart/alternative;  
boundary="-----\_NextPart\_000\_0008\_01BD1575.A1FE5AC0"

This is a multi-part message in MIME format.

-----\_NextPart\_000\_0008\_01BD1575.A1FE5AC0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

if any of you know of any electronic parts suppliers on line other than  
dans small parts and the electronic goldmine please email me direct  
the internet address (url) I'm looking for wholesale distrub. suchs as =  
dans  
to add to my web page.

-----=\_NextPart\_000\_0008\_01BD1575.A1FE5AC0

Content-Type: text/html;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">

<HTML>

<HEAD>

<META content=3Dtext/html; charset=3Diso-8859-1 =

http-equiv=3DContent-Type>

<META content=3D'"MSHTML 4.71.1712.3"' name=3DGENERATOR>

</HEAD>

<BODY bgColor=3D#ffffff>

<DIV><FONT color=3D#000000 size=3D2>if any of you know of any electronic =  
parts=20

suppliers on line other than</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2>dans small parts and the electronic =  
goldmine=20

please email me direct</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2>the internet address (url) I'm =  
looking for=20

wholesale distrub. suchs as dans</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2>to add to my web=20  
page.</FONT></DIV></BODY></HTML>

-----=\_NextPart\_000\_0008\_01BD1575.A1FE5AC0--

Date: Tue, 30 Dec 1997 21:10:56 -0700

From: flydnq7x@primenet.com (Floyd Smithberg)

To: qrp-1@Lehigh.EDU

Subject: [34070] 49r vs TS850

Message-ID: <199712310410.VAA20303@smtp04.primenet.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

After struggling with the 49r at 300mW with its half inch dia tuning knob  
for the last two nites with little success(worked hard for a couple CA, NV  
and local AZ). I set up my TS850 for 300mW out...same antenna(phased  
verticals) and worked:

N6MM Harvey CA

W5VBO Brian AZ

NF2AR Rick NY

WBOY Dan CO  
WQ4RP Randy SC and  
W0RSP ADE SD

Was sure a pleasant surprise to hear Ade in there and also to work Randy using a 49r... Not a big score but nice to make it to both coasts with only 300mW...thanks to the good ears of Randy, Rick et al.  
73 Floyd NQ7X Phoenix ScQRPion DM33uq QRP-L 343  
ARRL AMSAT ARCI G-QRP NORCAL DX WRKD HF=324 SAT=101 QRP=108

-----  
Date: Wed, 31 Dec 1997 04:14:27 GMT  
From: mwattcpa@earthlink.net (Marty Watt)  
To: qrp-l@Lehigh.EDU  
Subject: [34071] Mobile Antenna Solutions  
Message-ID: <34abc515.79100822@mail.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: quoted-printable

Thanks for the input on mobile antenna solutions. Everyone recommended different things, the basic decision being which bands to work. =  
Monobands  
appear to be recommended slightly, with wind-loading a concern for =  
multi-band  
"spider" types. The Outbacker also recommended as a compromise, but you =  
still  
have to stop, get out, and change bands.

One recommended a screwdriver antenna -- an interesting prospect, I must admit. But for the time being, I have the offer of some used Hustler and Valor equipment that I will take him/her up on. I will be looking =  
closely at  
the Screwdriver antenna at hamfests next spring ...

Again, many thanks!

PS -- some seemed to think because I drive a BMW that purchase was the =  
only  
option I'd go for -- far from it. I bought the 1986 BMW 325e 18 months =  
ago  
while unemployed for \$4K with 140,000 miles already on it. While I'm not looking forward to drilling holes, some hidden damage isn't out of the question -- nor is homebrewed antennas!

72 es 73 de Marty, KM7W

-----  
=46ranklin, Tennessee <http://home.earthlink.net/~mwattcpa> =  
=20  
NorCal #2031 - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM65nv

-----  
Date: Tue, 30 Dec 1997 23:29:38 EST  
From: ori@juno.com (Ori K Mizrahi-Shalom)  
To: Josh.Gould@axom.com  
Cc: qrp-l@Lehigh.EDU  
Subject: [34072] Re: CW (or: My CW Story)  
Message-ID: <19971229.234423.13679.0.ori@juno.com>

Looks like everybody goes back to their story of how they got into ham radio and CW... lots of good memories for sure.

To Josh I would say that you have all the luxury one can expect to pick up the code and get started the right way. All those elmers on the list and an abundance of information, training programs on home computers (even a Mac...), tapes to listen to, ARRL bulletins - you really got it easy!

My start was not even close to that. It was from an article in an old magazine.

"Ham radio? WOW!!!"

I was in a deep shock for a few days when it dawned on me there are people that do that! Talk to otther people around the world! The first book I found was in a used book store, and it outlined net operation (nothing like this net!) and other "essential" parts of the hobby... Morse code I picked up from DOT and DASH drawings. I did find a straight key with a buzzer, but that was a few years after that. I used to whistle the code and actually got pretty good at... 3 WPM... Then one day I saw an ad on a bulletin board (a real one - in the middle of a real street) about a ham CLUB.

CLUB? Can't pass that one. Well, it took a few weeks until I connected with the instructor.

Turned out there were too few people for that class. Anyway, we ended up three kids in a small station room - maybe 10'X10' with an old radio that needed some serious help.

The antenna was great - a 2 element Quad, homebrewed by the instructor.  
>From that point, there was no way back!

I went for my license and passed very quickly. In fact, going from 3WPM to 20WPM took about one month. The reason being, that FOR YEARS I had been getting used to the SOUND OF CW, so I had the LANGUAGE BASICS and the rest was just details...

Josh, you got it made...

Reading all the great advice on the list, I would add only one more.  
Think of the code as a language, as a challenge. It's not more archaic  
than Chess, Golf or Tennis.  
It's exactly the same: a hobby that has a real challenge behind it.  
You connect with people on an Internet chat, what do you know  
about them? Not much!  
Do you have anything in common? Who Knows...  
You call a CQ on the CW sub-bands, you know the person on the other  
side most likely LOVES this mode of communications!  
If you ever wanted to belong to any group, can you think of any that is  
more fun?  
CW is hard in the beginning, but that's the nature of all REWARDING  
things in life!  
If they are too easy, then what's the point of doing them in the first  
place?  
This is not a criticism, Josh. I'm just trying to convey to you my  
feelings  
about the hobby and about CW!  
I hope you will someday feel about it the same a lot of us here feel  
about CW.  
It may happen, when you go through that tough learning phase into the  
"having fun" phase of your CW HOBBY!

GL

ORI AC6AN

-----  
Date: Tue, 30 Dec 1997 22:41:52 -0600  
From: "Kelly Ellison" <kelman@dialnet.net>  
To: <qrp-1@Lehigh.EDU>  
Subject: [34073] Trade Icom 730 for QRP stuff  
Message-ID: <199712310440.WAA17002@shell.dialnet.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Hi All,

I have got a Icom 730 that I would like to trade for something QRP. I  
would like to try a Scout,  
OHR400, and still looking for that elusive TAC-1 40 meter unit. The  
IC730 comes with the SM-5 Desk mic, Manual and DC cord - no other  
options. This rig makes a great QRP rig. Please let me know if you are  
interested in the 730.

BTW, I hope that no one minds my horse trading here on QRP-L.  
Horsetrading and operating are two aspects of QRP that I enjoy. If it bothers you let me know by direct Email please. Happy New year everyone and I look forward to another year of QRP-L. Thank you,

Kelly Ellison  
WB0WQS  
QRP-L #702  
Aurora, Missouri

-----  
Date: Tue, 30 Dec 1997 23:58:23 -0500  
From: "Kenneth W. Evans" <w4du@bellsouth.net>  
To: qrp-l@Lehigh.EDU  
Subject: [34074] Emtech FS  
Message-ID: <34A9D0EF.6F70FAF5@bellsouth.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Due to a generous Santa (and my son -N4XXR-not checking my to be built box), I now have an "extra" Emtech NW8020 (for 20 meters); Comes with cabinet and audio filter -all ready to be built and untouched by my hands.

\$100.00 plus shipping. Please contact me direct via e-mail below.

72/3,  
Ken           w4du@bellsouth.net  
W4DU

-----  
Date: Tue, 30 Dec 1997 21:07:22 -0800  
From: Bill Todd <bill@techline.com>  
To: qrp-l@Lehigh.EDU  
Cc: slee@u.washington.edu  
Subject: [34075] HW-16ers Unite for SKN!  
Message-ID: <1.5.4.32.19971231050722.00704ccc@mail.techline.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"



Greetings -

Sounds like my buddy Stephen (AB7HI) and I will both be using the old Heathkit HW-16 for Straight Key Night.

Anyone else out there wanna try one too, just for giggles? I don't know about yours, but if you tune the "power level" control all the way down, AND de-tune the "Tune" control...you can actually get down to 5 watts without doing any internal foolin around.

Though it is true that you will loose a little bit of audio gain when you de-tune the "tune" control, it's not all that much.

So what do you say, HW-16 fans?

CUL, Bill-N7MFB

-----  
Date: Wed, 31 Dec 97 05:18:22  
From: "KA5T Larry Wise" <lewise@inetport.com>  
To: "qrp" <qrp-1@Lehigh.EDU>  
Subject: [34076] SMT parts ID  
Message-ID: <199712310522.XAA05434@admin.inetport.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

Can anyone point me to an online source of ID info for these kinds of parts??

The ARRL handbook for 1997 has a section on the encoding for resistors and capacitors, but nothing on transistors, diodes, inductors and 'otherstuff'....

Mouser catalog doesn't seem to have the marking info, although the sure seem to have a lot of SMT parts....

'So what the heck are you doing?' you say .....

Well you see some time back I had to replace the controller module on the water softener....Before laying out the cash for the new one I opened up the old one to 'see what I could see'.....Well, I see this big one or two watt resistor burned to a crisp in there.....

Hmmmm....wonder if it would work if I replace it....(Yeah... Sure..)  
Of course it didn't....

But, more to the point, the module is just a PCB about the size of the NC38S board with mostly SMT parts with a few 'normal' sized parts on it....Hummmm wonder what these all are exactly.....and wonder if we can use them.....Hummmm

Lets see... there's a full wave rectifier with 1N4002 diodes....a 78L05 regulator....something called a MAC97A8.....Normal sized stuff....  
Big chip, probably a special purpose processor for the logic and driving the display and the switches and the motor...(NEC7083877 v1-0)  
Hummmm three small chips ...SM LM393, SM CSI 93C46K, and a HEF401066BT.....First one looks familiar...last one looks like a cmos chip marking....Hummmmmmm....

Anyway you get the picture....

So I learn how to read the resistor and capacitor codes from the ARRL HB....Only thing that throws me there are a couple of caps with no marks on them....Suppose they're soldered on upside down???? Hummmmm....

X1 and X2...crystals??? Resonators??? one unmarked 2 terminal...  
one 3 terminal marked 4190A 981 with the 98 underlined....Hummmm

Several 3 legged devices...Legend for some CRn... others Qn....  
AHA....transistors....But what are the CRn??? Don't look like 3 leads are used on these....Diodes in a three terminal package????

So I put it aside to 'look at it later' (got 40 years of stuff like that :-)

Then this fall when we were up in the north country visiting the son, he was using some dead PCBs to salvage some connectors for some computer work...and I was looking at the PCBs.....Hummmmmmm  
More BaZillions of SMTs....transistors, inductors, and gobs and gobs (well several) of resistors and caps...and Hummmm X1....crystals and/or resonators.....

Brought 'um home with me....

So the last several nights while tuning around listening for pixies and 40-9ers....The thought went fleeting by"wonder if you could make

a pixie or the TX portion of the 40-9er with the SMT parts in the junkbox?"

Did a quick inventory and sure looks like plenty of resistors and caps,  
but gotta learn how they mark those other devices....

Sooooo if anyone can point me in the right direction for this type of info  
would appreciate it.....

Larry KA5T lewise@inetport.com Georgetown, Texas

-----  
Date: Tue, 30 Dec 1997 21:26:14 -0800  
From: "Bob White" <bobwhite@accesscom.com>  
To: <qrp-1@Lehigh.EDU>  
Cc: <adams@sgi.com>  
Subject: [34077] Fox Results 30 Dec W03B  
Message-ID: <199712310527.VAA00097@ns2.accesscom.com>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Well it was a rough one for sure, but the contact were spread across the  
main land with 19 states plus Canada worked with 42 contacts. Thanks to all  
who participated. I am truly sorry for those that I could not work. There  
were quite a few that I just could not pull in. The rig was a Kenwood TS  
940 with no external filters, (I will get all that set up for the next  
round), and the antenna was a GAP Titan, (the large loop from MD is still in  
the trunk of my car with no room for it at the new QTH).

Top Dogs AZ 10  
Second TX 7 (see Chuck I was not picking on those two states)  
Third CA 5  
Fourth UT, AL, MN 2 (where did these guys come from?)  
The rest MT, AR, NM, GA, NJ, IL, IA, OK, VA, MO, FL, MD, KY, and ONT

300 N6WG BOB CA 26  
1 NQ7X FLOYD AZ 343  
1 K1MG MIKE CA 0W  
3 WA6NAE DWIGHT CA 5W

|     |            |        |     |      |
|-----|------------|--------|-----|------|
| 4   | AB7TT      | JOE    | AZ  | 191  |
| 5   | N7GS MAL   | MT     |     | 815  |
| 10  | N4XDW      | JACK   | AR  | 1372 |
| 11  | AB7ST      | BOB    | UT  | 129  |
| 12  | W7QQQ      | JACK   | AZ  | 1210 |
| 17  | KI7MN      | BOB    | AZ  | 271  |
| 18  | W5SB BILL  | TX     |     | 1279 |
| 21  | W5FN TIM   | TX     |     | 586  |
| 27  | K5OI TIM   | NM     |     | 73   |
| 28  | AA4GA      | BILL   | GA  | 1394 |
| 34  | N7VE DAN   | AL     |     | 696  |
| 38  | WW7Y STEVE | UT     |     | 94   |
| 41  | KI6OY      | LEE    | CA  | 837  |
| 42  | N7KT ROGER | AZ     |     | 62   |
| 45  | AB7MY      | GARY   | AZ  | 571  |
| 46  | N7IR GARY  | AZ     |     | 1330 |
| 46  | N7XJW      | BERTIE | AZ  | 1259 |
| 51  | KJ3V MARV  | AL     |     | 1227 |
| 57  | K5ID KEN   | AZ     |     | 652  |
| 400 | K0EVZ      | DOC    | MN  | 861  |
| 8   | N5JI DICK  | TX     |     | 1054 |
| 10  | N4JS JOHN  | NJ     |     | 884  |
| 17  | W5HNS      | HENRY  | TX  | 178  |
| 19  | N9KW JOHN  | IL     |     | 1257 |
| 21  | WB0T JERRY | IA     |     | 1268 |
| 25  | AB5UA      | CLIFF  | OK  | 478  |
| 28  | WA4DAI     | ARCH   | VA  | 1311 |
| 30  | W0CH DAVE  | MO     |     | 618  |
| 32  | N1TP TOM   | FL     |     | 1317 |
| 34  | W9UQB      | MIKE   | AZ  | 413  |
| 40  | AA5TA      | LARRY  | TX  | 1245 |
| 42  | N3XRV      | CHRIS  | MD  | 655  |
| 46  | NI0A JOHN  | MN     |     | 689  |
| 46  | K5ZTY      | BILL   | TX  | 473  |
| 52  | VE3ELA     | KEN    | ONT | 1226 |
| 53  | K5JHP      | BILL   | TX  | 825  |
| 55  | KA80KH     | RICH   | KY  | 933  |
| 59  | W6ZH PETE  | CA     |     | 256  |

Thanks to all. Lets hope for better conditions the next go round.

72,  
Bob W03B

-----

Date: Tue, 30 Dec 1997 23:04:55 +0000  
From: Roger Hightower <n7kt@earthlink.net>  
To: bobwhite@accesscom.com  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [34078] Re: Fox Results 30 Dec W03B  
Message-ID: <34A97E17.742EF6B3@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Well, the AZ guys 'n' gals did it big time. Actually, there were ELEVEN of us, when you count N7VE Dan, who is \_not\_ from AL, :-)

--

72/73, de Roger, N7KT

-----  
Date: Wed, 31 Dec 1997 01:10:29 -0500 (EST)  
From: Mike Czuhajewski <wa8mcq@u1.abs.net>  
To: qrp forum <qrp-l@Lehigh.EDU>  
Subject: [34079] January QRP Quarterly on the way  
Message-ID: <Pine.BSI.3.96.971231010206.5053A-100000@u1.abs.net>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

I got my box of advance copies today, and it's lookin' real good! This one will choke a horse--keep it away from Mister Ed :-) We sort of promise to do 48 pages per issue, but Monte, the editor, occasionally goes over that "limit" and takes the heat for it; he's gone as high as 60 once, but this time there was enough material for 66 pages. I don't think he'll catch too much flak on this one, though, despite the size and cost--a superb effort by him and all those who contribute to the Quarterly.

And if anyone wants to sign up or renew a lapsed subscription, if you hurry you can probably get them to start it with the January issue--there should be a few left over after all the subscriptions are sent out.

The USPS is said to have them, and they should be in your mailboxes shortly.

73 and Queue Our Pea DE WA8MCQ                      wa8mcq@abs.net

-----

Date: Wed, 31 Dec 1997 06:06:46 -0800  
From: "Harvey D. D. Hetland" <n6mm@earthlink.net>  
To: QRP-L@Lehigh.EDU  
Subject: [34080] Re: Pixie/40-9er test  
Message-ID: <34AA4FF7.6EB3@earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

I spent the first three nights (one hour each evening) from W6BAB using dipoles and an OHR-400 at 5W. Sorry, but W6BAB is not a "QRP Club". The fourth evening (Dec 30th UTC) I operated the first hour with a Pixie II finished a few minutes before the start of the contest ... boy do I tip my hat to those, like K0EVZ, who have been successful with their Pixies. I only worked three stations (KF0N, WE6W and W8FT along with a SWL report from AL7FS), before switching to a GM-40 at 2 watts. The Pixie was producing 500 to 600 mW using a 14 volts d.c. battery. I need to add a good audio filter, more audio gain and better control of the transmitter offset frequency on the Pixie. A little tricky to maintain the offset when making the crystal control a VXO operation.

For the last evening (Dec 31st UTC) I operated from N6MM again using the GM-40 with an OHR DD-1 digital display hastily interfaced minutes before the start using a couple of J310 JFETS to produce 1.2 volts peak-to-peak squarewave without loading the local oscillator (going to add that circuit to my Sierra too). The GM-40 was also modified to adjust the crystal frequency in the product detector for a 600 to 700 Hertz pitch with lower sideband tuning for improved rejection of the unwanted sideband. I also need to add an audio filter to the GM-40 and look into narrowing the IF filter to improve the signal-to-noise ratio. I am sure looking forward to W6EMD's article on the GM series in the coming issue of the "QRPP" for ideas on hot rodding the Green Mountain rigs. Running two watts with the GM-40 I worked the following stations on 40m:

|       |         |          |        |       |
|-------|---------|----------|--------|-------|
| W5VBO | NF2AR/C | K3RNX/7  | KA5T   | NQ7X  |
| N1TP  | N0TU    | WQ4RP    | WA1DBR | KJ5MG |
| W3WMY | KI0G    | AL7FS    | AB5PC  | VE6XT |
| AA0B  | WB6DNQ  | AB7MY    | WI6J   | AC6AN |
| W0RSP | N7CQR   | KL7IXI/7 | N7XM   |       |

Like Bill, N8ET, mentioned yesterday, I spent a lot of time explaining the exchange to QRPers that were not informed via Internet. Perhaps that shows the value of publicity in the print media for activities if participation from the general QRP community is desired. I suggest that any future contest announcements use ONLY UTC date AND time to avoid confusion. I have to stop and think with this EST stuff, but UTC comes naturally. Would you put EST on your QSL card to a rare DX station? Of course not! Lose the "novice accent", use only UTC.

The format of spreading the activity over a few evenings and allowing

repeat QSOs on separate evenings seemed to encourage some comradery between the participants. It was also interesting to see what rigs folks were using each evening.

My thanks to all the participants. You are a great bunch and made it an enjoyable event.

73, Harvey, N6MM (Operator at W6BAB)

-----  
Date: Tue, 30 Dec 1997 22:09:44 -0000  
From: John Anthony Reynolds <D2250077@infotrade.co.uk>  
To: "'gqrp-1@blacksheep.org'" <gqrp-1@blacksheep.org>, "'qrp-1@lehigh.EDU'" <qrp-1@Lehigh.EDU>  
Subject: [34081] Rx Mixers Query  
Message-ID: <01BD15B7.6B619E40@default>

Hi Guys,

I am about to construct a receiver for use mainly on 7Mhz and would appreciate comments as to which is the best mixer to use:

(a) SBL-1 Ring Mixer

or

(b) SL6440 Double balanced Mixer

The problem over here in Europe is the excessive amount of BC cross mod and my old TRIO TS120 suffers badly on 7Mhz, hence the need to improve matters somewhat.

I have both devices but am unsure as to which will perform better. Incidentally, is it best to use a square wave local oscillator injection when using the ring mixer?

I look forward to any comments

73 es John G3PT0 GQRP # 595

-----  
Date: Wed, 31 Dec 1997 02:00:53 -0800  
From: Randy Hargenrader <randyh@harksystems.com>  
To: qrp-1@Lehigh.EDU, "klqrp@waterw.com" <klqrp@waterw.com>  
Subject: [34082] WQ4RP Pixie/49er log...  
Message-ID: <34AA17D5.4A6055E3@harksystems.com>  
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

For the last night of the contest I could only operate the first hour and a half. Spent the most time on 40 since the Pixie freq (3.686.4) had S9 10+ ragchewers on it. Not a lot of stations worked but I'm impressed by the "quality"! Nabbed:  
K0EVZ in MN, N1TP in FL, N6MM in CA, W5VHO in AZ, KA5T in TX, NQ7X in AZ, and N0TU in CO.  
A good time was had by all! My thanks to all the participants. Also, thanks to all the club stations that supported the contest. What a great bunch!  
--  
73, Randy WJ4P  
Knightlites QRP-L #296

-----  
Date: Wed, 31 Dec 1997 01:44:35  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: qrp-l@Lehigh.EDU  
Subject: [34083] Re: K1MG's calculations: mi/watt  
Message-ID: <3.0.1.16.19971231014435.2c077dec@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Facinating info there Mike.

You did say you used a 3 ft piece of coax to the dummy load, so wonder how much signal was also being radiating/ received by the connecting cable? Guess next time you'll have to find the adaptors to connect the load right to the back of the rig :-)

Indeed, astounding miles per watt can be achieved at short distances. I have some problem with the 1000 miles per watt, unless the distances involved are reasonably significant. Say, 100 miles min at HF frequencies. Of course, there are exceptions, the miles per watt signals Paul Hardon talks about at the VLA are, not surprisingly, astronomical.

Amazingly, earlier this evening, I was toying with the idea of placing a watt meter at the antenna feed point and relaying the data back down the coax. I'm sure it can be done and might be interesting. Gonna think about that one for a while...

72,  
Steve, KD1JV....In the White Mountains of New Hampshire



"Melt Solder"

-----  
Date: Wed, 31 Dec 1997 17:24:25 +0800  
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>  
To: qrp@pandora.lugs.org.sg  
Subject: [34084] 1/2-wave dipole --- 50ohm feed  
Message-ID: <34aa0f4a.pandora@pandora.lugs.org.sg>

Hi,

I was wondering if there would be problems arising from feeding a 1/2-wave dipole with a 50ohm coax? I am wondering about this when I noticed that I was unable to get 1:1 SWR no matter how I trimmed the thing. Then I realized that the impedance should be closer to 75ohms.

So, I am asking myself what can be done to fix this. Will the following work?

1. Balun
2. Extending one leg of the dipole
3. Adjusting the length of the feed

I'd appreciate any feedback, thanks and have a Happy New Year you all.

73 de 9V1ZV Daniel

--

```
+-----+
| Daniel Wee | daniel@pandora.lugs.org.sg |
| 9V1ZV      |                               |
| QRP-L #667 | 9V1ZV@amsat.org             |
+-----+
```

-----  
Date: Wed, 31 Dec 1997 06:30:22 EST  
From: KE1HO <KE1HO@aol.com>  
To: vole@primenet.com, qrp-l@Lehigh.EDU (Low Power Amateur Radio Discussion)  
Subject: [34085] Re: Dark and Early on 40m....  
Message-ID: <ca049c94.34aa2cd0@aol.com>  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Hi Joe,

Yesterday was just as bad... New South Wales on 15M, and the guy was rag chewing...

It was brutal!!!!

I never touched him, I think my signal just bounced off the din.

We'll get 'em someday...

Come on SSC#23!!!!

CUL

Steve/KE1HO

-----  
Date: Wed, 31 Dec 1997 07:30:02 -0500

From: n3fel@juno.com (Howard D Rubin)

To: daniel@pandora.lugs.org.sg

Cc: qrp-1@Lehigh.EDU

Subject: [34086] Re: 1/2-wave dipole --- 50ohm feed

Message-ID: <19971231.073004.6718.3.n3fel@juno.com>

W. Daniel,

You might try raising the center feedpoint to form about a 90 angle with the ground plane. The effect is to lower the feedpoint impedance to about 50 ohms and should improve your match. Refer to "Inverted Vee" antennas.

Howard Rubin, N3FEL

On Wed, 31 Dec 1997 17:24:25 +0800 "W. Daniel, 9V1ZV"

<daniel@pandora.lugs.org.sg> writes:

>Hi,

>

> I was wondering if there would be problems arising from feeding a

>1/2-wave dipole with a 50ohm coax? I am wondering about this when I

>noticed

>that I was unable to get 1:1 SWR no matter how I trimmed the thing.

>Then I

>realized that the impedance should be closer to 75ohms.

>

> So, I am asking myself what can be done to fix this. Will the

>following

>work?

>

>1. Balun

>

>2. Extending one leg of the dipole

>  
>3. Adjusting the length of the feed  
>  
> I'd appreciate any feedback, thanks and have a Happy New Year you  
>all.  
>  
>73 de 9V1ZV Daniel  
>--  
>+-----+-----+  
>| Daniel Wee | daniel@pandora.lugs.org.sg |  
>| 9V1ZV | |  
>| QRP-L #667 | 9V1ZV@amsat.org |  
>+-----+-----+  
>  
>

-----  
Date: Wed, 31 Dec 1997 13:41:20 GMT  
From: Rogerio Gonzaga <gonzaga@med.up.pt>  
To: qrp-l@Lehigh.EDU  
Subject: [34087] CT1ETT will be in Orlando next January  
Message-ID: <199712311341.NAA05802@mail.med.up.pt>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

Hi, Gang,

I will be in Orlando next January, to participate in a Medical Meeting.

Time to look for radio material (morse keys, junks, eventually kits) will be very scarce.

Can anyone please give me some dealer addresses or eventual ham fests to use any eventual timetable brake?

I will go through NY (by the 16 /17 or so) and then to FL (maybe until the 22), the timetable is not yet completely stated.

Of course I will take an handheld for two meters, and maybe a 20 m qrp for CW.

Best 72/73 de Roger, CT1ETT

Prof. Rogerio A. F. Gonzaga, MD, PhD  
Surgical Professor at the Faculdade de Medicina do Porto - Portugal  
Ex-Honorary Surgical Registrar at the Hammersmith Hospital - London, UK  
Member of the Portuguese College of Surgeons

|                          |                 |                   |
|--------------------------|-----------------|-------------------|
| Radio Amateur CT1ETT     |                 | QTH Loc IN51re    |
| G-QRP Club # 8673        | ISWL # CT-20574 | QRP-L # 516       |
| NorCal QRP Club # 2130   | ARS # 268       | REP # 840         |
|                          | FISTS # 2878    |                   |
| Email: gonzaga@med.up.pt | OR              | rafg@esoterica.pt |

-----  
Date: Wed, 31 Dec 1997 07:59:13 EST  
From: nq2rp@juno.com (B/BAMS Club Station)  
To: qrp-l@Lehigh.EDU  
Subject: [34088] Pixie/49'er and SNOW  
Message-ID: <19971231.075838.7911.1.nq2rp@juno.com>

WNY is know for its snow. Especially its Lake-Effect snow. Apparently, one should include snow static and static build-up from the wind-driven snow...

I spent about an hour each nite this week, and made 3 contacts from NQ2RP, and one of them was iffy. After scratching my head, and realizing that my TimeKube was hearing WWV at 5 MHZ fine when 40 sounded totally dead finally prompted me to look further. I put my OHR QRP Classic on in place of the club's Triton IV, and....

SIGNALS!!!!!!!!!!!! LOT'S OF THEM, AND THEY ARE >>>>>>L O U D <<<<<<<

I appologize to anyone that tried to work me on 80 or 40 and didn't get a reply. I have to track down what died in the Triton IV on RX, but I have about a 1000 uV MDS right now on the RX section. Output is still fine.

Lou, KA2DQA tried to get on 40 with the club call, but S-9+60 line noise was present, and he shut the rig off without making a call.

For the 5 Pixies and 40-9er's I did work, glad to catch you on the Test. The next one, I will be running a pair of SMiTe's. The check should be there now...

And I am watching the mailbox.....

Oh yeah, 100% QSL from here for any QSO's from the club. B/BAMS mailing address is the same as mine (of course), and listed below...

72/73, Keith, WB2VUO at the keys at B/BAMS

NQ2RP - QRP-L # 1294,

Byron/Bergen Amateur Microwaves System Club Station

Listen for our 10 Mtr Milliwatting Beacon: 125 mW @ 28.287 MHz

"Our night light runs more power than our Rig!!!"

SnailMail: B/BAMS

41 North Lake Avenue

Bergen, NY 14416

-----  
Date: Wed, 31 Dec 1997 07:46:30 -0000

From: "Juan Antonio Lopez Delgado, EA8QJ, EA-QRP # 196" <jalopezd@arrakis.es>

To: <qrp-l@Lehigh.EDU>

Subject: [34089] Trajajando en...

Message-ID: <01bd15c0\$350b9ea0\$LocalHost@default>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hola amigos:

Estamos trabajando en la actualizacion de nuestra Web Site,  
en la que incluiremos otros idiomas.

Rogamos sepan disculparnos por las molestias que les podamos  
causar. Gracias.

FELIZ Y PROSPERO 1998!

72

Juan Antonio Lopez, EA8QJ, EA-QRP # 196

EA-QRP Club - Relaciones y Desarrollo

mailto:jalopezd@arrakis.es

Homepage EA-QRP Club <http://www.eaqrp-c.arrakis.es>

(Con omision intencionada de tildes)

-----  
Date: Wed, 31 Dec 1997 08:38:56 EST  
From: nq2rp@juno.com (B/BAMS Club Station)  
To: qrp-1@Lehigh.EDU  
Subject: [34090] Joel Malman <malman@BBN.COM>: Beacon (?) question  
Message-ID: <19971231.083907.7911.3.nq2rp@juno.com>

>From: Joel Malman <malman@BBN.COM>  
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
>Subject: Beacon (?) question  
>Date: Tue, 30 Dec 97 22:20:36 EST

>Folks,

>While not really QRP -- but involves a 'near' QRP calling frequency...

-----< snip >-----

>Here is a transcript of the text. It is sent at about 25 wpm.

> VVV VVV VVV de SXA/G/29/39 SXA/G/29/39 SXA/G/29/39 [ 5 sec pause ]  
> K13A/G K13A/G K13A/G

>Then message repeats after about 2 seconds. Anyone have a clue?

>/joel wa1qvm wa1qvm@bbn.com (QTH: Concord, Massachusetts)

I have heard this station on for a couple of years, and looked up the prefix (SXA in the Handbook. The Call sequence SVA - SZZ is assigned to Greece, and the format we've been hearing is similar to the coastal maritime stations, but without the frequencies being monitored.

My bet is a Greek coastal station, probably in Southern Greece. Any of our EU brethren/sistern hear this one, and how strong is it in EU ???

72/73, Keith, WB2VUO at the keys at B/BAMS  
NQ2RP - QRP-L # 1294,  
Byron/Bergen Amateur Microwaves System Club Station  
Listen for our 10 Mtr Milliwatting Beacon: 125 mW @ 28.287 MHz  
"Our night light runs more power than our Rig!!!"

BTW: The lack of the signal was a clue that the Ten Tec had developed a

problem.

-----  
Date: Wed, 31 Dec 1997 13:49:12 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-1@Lehigh.EDU  
Subject: [34091] Hangar 9 Charger Update  
Message-ID: <199712311349.NAA01395@chuck.dallas.sgi.com>

Gang,

Hold off on this puppy right now.

After posting to the group I tried another DVM and found that the R/S that I was using previously had low batteries.

The voltage from the charger was nearer to 15.88V, which is way too high and this a.m. after the battery is fully charged the voltage was at 16.00V. This is too much to have on a charged Gel-Cell and most likely will damage it if left on continuously.

I am going to discharge the 4Ahr battery fully today by getting on 30M until midnight or running a reading lamp at 12V until I get the battery voltage under 8V and then start all over.

Stay tuned to this latest episode. Willing to sacrifice one battery to the cause. May go to a cheaper battery for this experiment. :-)

FYI

Chuck Adams K5FO CP-60  
<http://reality.sgi.com/adams> adams@sgi.com

-----  
Date: Wed, 31 Dec 1997 10:10:12 -0500 (EST)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: QRP Reflector <qrp-1@Lehigh.EDU>  
Subject: [34092] Re: Fox Results 30 Dec W03B

Message-ID: <Pine.LNX.3.93.971231095620.604A-100000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 30 Dec 1997, Bob White wrote:

> 42 N3XRV      CHRIS      MD      655

Ahhh, you didn't forget your "old" friends like "they" said you would ;) The first hour all I heard was the occasional hunter from TX. Took a 45 minute break, and you were calling CQ FOX as soon as I sat back down at the rig. Total time to work the fox, 45 seconds. (Plus that hour listening to nuttin') Didn't know until your post if I got through, heard one dah of your response and then I got "digi-tized" big time, S9+. Thanks again, and my what big ears you have Bob :) Coast to coast on 4W with some wire in a tree, this stuff really is magic. 72

-- Chris Cartwright,    Technical Engineer    |      ccart@vidtel.com      --  
-- N3XRV      ARRL-VE    QRP WAS 28/13(w/c)    | http://dns.vidtel.com/~ccart --  
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? MDmW #5 --

-----  
Date: Wed, 31 Dec 1997 14:13:36 GMT  
From: mwattcpa@earthlink.net (Marty Watt)  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [34093] Re: CW (or: My CW Story)  
Message-ID: <34aa5299.115335047@mail.earthlink.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: quoted-printable

On Tue, 30 Dec 1997 23:29:38 EST, ori@juno.com (Ori K Mizrahi-Shalom) = wrote:

>Reading all the great advice on the list, I would add only one more.  
>Think of the code as a language, as a challenge. It's not more archaic  
>than Chess, Golf or Tennis.

And sailing. And ballooning. And hiking.

Geez, why would someone sail (or balloon or hike) when motorized = transport is available? How archaic!

Because it's FUN! That's why!



72 es 73 de Marty, KM7W

-----  
=46ranklin, Tennessee                      <http://home.earthlink.net/~mwattcpa> =  
=20  
NorCal #2031 - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM65nv

-----  
Date: Wed, 31 Dec 1997 14:14:33 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: malman@BBN.COM  
Cc: qrp-l@Lehigh.EDU  
Subject: [34094] Re: my turn to dance  
Message-ID: <199712311414.0AA01541@chuck.dallas.sgi.com>

Joel,

Last night after listening for Preston for a couple of hours and not hearing him in the Novice band, I too went up to 30M. Worked 3B8CF his 599 my 559 and my 950mW. What a thrill. You must have been tired after the 'happy dance' that I see several here on the list doing after some significant event. :-) 'cuz if you had stayed around later you would have caught PS7YG and several others.

Now tonight will probably find the bands crowded due to holiday tomorrow, unless there are a lot of hams going to parties and stuff. And the A-index is started a significant jump today and may have an impact on propagation, but hopefully all this foolishness will end before the MI QRP contest starting sunrise on Saturday.

People have just got to quit giving up on 30M after the sun goes down. It is staying open very late and it was after 11pm local here last night that I finally didn't hear signals from anywhere. WWV on 10.000000000MHz was strong until about that time.

Worked Gary AB7MY for about 20 minutes with both of us on keyboards and his going between rigs. I finally got rid of the RFI in the MFJ-451 after some work on it and I didn't have to call the hotline as suggested by some. I love it when I learn something new each day..... BTW Gary was using the new critter that was in the December QST with the PIC chip.

So now I can send as fast as anyone wants to go. :-)

So your posting and this posting to the group will now cause a rush to 30M after the foxhunts. :-) Its a lot easier working

the DX when you are the only one around.....

Good catch and good luck.

FYI to the group at large

dit dit

Chuck Adams K5F0 CP-60  
<http://reality.sgi.com/adams> adams@sgi.com

-----  
Date: Wed, 31 Dec 1997 07:21:31 -0700 (MST)  
From: Chris Trask <ctrask@primenet.com>  
To: John Anthony Reynolds <D2250077@infotrade.co.uk>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [34095] Re: Rx Mixers Query  
Message-ID: <Pine.BSI.3.96.971231071849.5924A-1000000@usr09.primenet.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 30 Dec 1997, John Anthony Reynolds wrote:

> I am about to construct a receiver for use mainly on 7Mhz and  
> would appreciate comments as to which is the best mixer to use:  
>  
> (a) SBL-1 Ring Mixer  
> or  
> (b) SL6440 Double balanced Mixer  
>  
> The problem over here in Europe is the excessive amount of BC cross mod  
> and my old TRIO TS120 suffers badly on 7Mhz, hence the need to improve  
> matters somewhat.  
> I have both devices but am unsure as to which will perform better.  
> Incidentally, is it best to use a square wave local oscillator injection when  
> using the ring mixer?  
>

John,

You may want to look at my article in the September 1997 issue of  
RF Design for an active mixer that easily overcomes the intermodulation  
problems that you are concerned with.

Also, the square wave LO does help with intermodulation. Look  
at my web page under "Technical Bibliographies" and then "Intermodulation"  
and you'll find plenty of references on this subject.

Circuit Design for the  
RF Impaired

Chris Trask / N7ZWY  
Principal Engineer  
ATG Design Services  
P.O. Box 25240  
Tempe, Arizona 85285-5240

Technical Editor,  
QRP Quarterly  
QRP ARCI 9464

Email: [ctrask@primenet.com](mailto:ctrask@primenet.com)  
<http://www.primenet.com/~ctrask>

Date: Wed, 31 Dec 1997 10:47:42 -0500 (EST)  
From: Chris Cartwright <ccart@dns.vidtel.com>  
To: QRP Reflector <qrp-l@Lehigh.EDU>  
Subject: [34096] Re: Pixie/49'er and SNOW  
Message-ID: <Pine.LNX.3.93.971231104212.604B-100000@dns.vidtel.com>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 31 Dec 1997, B/BAMS Club Station wrote:

> The next one, I will be running a pair of SMiTe's. The check should be  
> there now...

Bob, any update on the SMiTe's? I'm not rushing you (still didn't get through the "pile" of kits yet) but, how's it going? How many are on order? What's the price for an assembled kit <grin>.

```
-- Chris Cartwright, Technical Engineer | ccart@vidtel.com --
-- N3XRV ARRL-VE QRP WAS 28/13(w/c) | http://dns.vidtel.com/~ccart --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? NJ-QRP #105 LIQRP #???? MDmW #5 --
```

-----  
Date: Wed, 31 Dec 1997 10:09:25 -0500  
From: cooper@gmpvt.com (Tom Cooper)  
To: qrp-l@Lehigh.EDU  
Subject: [34097] Re: my turn to dance  
Message-ID: <199712311509.KAA04162@web.gmpvt.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

20M was still active last night at 0200Z up here in Vermont, so I tuned around and heard A35RK (Tonga) calling CQ. I called him, as did most of the east coast, and I played pileup for a while as he got weaker and weaker. Then I heard N4ROA/QRP call and work him, so I kept trying and finally got through just as he faded out!

I was too tired from shoveling snow to do much dancing, though.

Tom W1EAT

-----  
Date: Wed, 31 Dec 1997 09:49:45 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: "INTERNET:flydnq7x@primenet.com" <flydnq7x@primenet.com>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>,  
    QRP-L Discussion Group <QRP-L@Lehigh.EDU>  
Subject: [34098] 49r vs TS850  
Message-ID: <199712310952\_MC2-2D9D-4872@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Floyd:

Sorry we did not manage a QSO during the contest. Don't remember hearing you...but there was quite a din, especially right on/near 7040 last evening :-). I ran the Pixie-II only one evening. Used the 40-9er the other times. BTW, was forced to add the OHR SCAF. Happy New Year.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V   Corsair I   Yaesu 900AT   Sierra   Norcal 40a   SW-40   49er  
Mercury Paddles   Emtech ZM-1   MFJ 259   MFJ 941D   Matchbox   GAP  
TNT/2 Windom   SLV/W6MMA   G5RV   Timewave 599zx   Autek QF-1   RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 09:49:40 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: "INTERNET:n6mm@earthlink.net" <n6mm@earthlink.net>, QRP-L Discussion Group  
<QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>  
Subject: [34099] Re: Pixie/40-9er test  
Message-ID: <199712310952\_MC2-2D9D-4871@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Harvey:

Well many thanks for digging out my signals a couple of evenings. Used both the Pixie-II and 40-9er, depending on the evening. The 40-9er seemed far superior at this QTH. Did use the OHR SCAF each evening. Without it simply could not pick anyone out. Never ran over 400mw, quite a change for K0EVZ.

Never considered upping the supply voltage for more power out ;^(. Oh well, next year. Speaking of which... I \*do\* hope we repeat this one!

Happy New Year to yo and everyone!

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqz 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V   Corsair I   Yaesu 900AT   Sierra   Norcal 40a   SW-40   49er  
Mercury Paddles   Emtech ZM-1   MFJ 259   MFJ 941D   Matchbox   GAP  
TNT/2 Windom   SLV/W6MMA   G5RV   Timewave 599zx   Autek QF-1   RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 09:49:35 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: "INTERNET:randyh@harksystems.com" <randyh@harksystems.com>, "Doc W.D. Lindsey/  
K0EVZ" <70511.3041@compuserve.com>,  
QRP-L Discussion Group <QRP-L@Lehigh.EDU>  
Subject: [34100] WQ4RP Pixie/49er log...  
Message-ID: <199712310952\_MC2-2D9D-4870@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Randy:

Thanks for coming back last evening. We were not zero-beat but I could  
no move very much with the 40-9er :-)! Your signal was one of the  
stronger ones in the area.

Last evening was short for me, returning from a day-long trip. Only on  
about 30 minutes, but managed 4 Q's. What a fun contest this one was.  
Sure hope we do it again.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V Corsair I Yaesu 900AT Sierra Norcal 40a SW-40 49er  
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D Matchbox GAP  
TNT/2 Windom SLV/W6MMA G5RV Timewave 599zx Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 09:49:27 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: "INTERNET:malman@BBN.COM" <malman@BBN.COM>, "Doc W.D. Lindsey/K0EVZ"  
<70511.3041@compuserve.com>, QRP-L Discussion Group <QRP-L@Lehigh.EDU>  
Subject: [34101] my turn to dance  
Message-ID: <199712310952\_MC2-2D9D-486E@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii

Content-Disposition: inline

Joel:

Congrats on this excellent catch. He \*will\* QSL...so if you need his address, let me know. I have his card prominently displayed :-).

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V Corsair I Yaesu 900AT Sierra Norcal 40a SW-40 49er  
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D Matchbox GAP  
TNT/2 Windom SLV/W6MMA G5RV Timewave 599zx Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 09:49:51 -0500

From: "Wilford D. Lindsey" <70511.3041@compuserve.com>

To: "INTERNET:lewise@inetport.com" <lewise@inetport.com>, QRP-L Discussion Group  
<QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>

Subject: [34102] Pixie/40-9er test

Message-ID: <199712310952\_MC2-2D9D-4873@compuserve.com>

MIME-Version: 1.0

Content-Transfer-Encoding: 7bit

Content-Type: text/plain; charset=us-ascii

Content-Disposition: inline

Larry:

The contest was very satisfying...but don't know if my ears will ever stop ringing from the 7040 din :-). Last evening was the worst of all for QRM. And when the RTTY started right in the middle of a try for WQ6RP, I finally said, \*enough is enough"!

But OTOH, sure hope we do it again next year. HeHeHeHe. Happy New Year everyone. Thanks to one and all who tried for K0EVZ during this truly fun-and-useful contest.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V   Corsair I   Yaesu 900AT   Sierra   Norcal 40a   SW-40   49er  
Mercury Paddles   Emtech ZM-1   MFJ 259   MFJ 941D   Matchbox   GAP  
TNT/2 Windom   SLV/W6MMA   G5RV   Timewave 599zx   Autek QF-1   RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 09:26:11 -0600  
From: TonyDrumm@ibm.net (Tony Drumm)  
To: qrp-1@Lehigh.EDU  
Subject: [34103] Rainbow tuner lives  
Message-ID: <199712311520.PAA26298@out2.ibm.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I finished my Rainbow Tuner yesterday after sitting on my bench for the better part of 1997. As I mentioned before, I did install it in the Barbie Candy tin. I thought of a great promo for Mattel to use: Radio Barbie and her Rainbow Tuner.

72.

Tony Drumm  
ARS AA0SM - Rochester, MN

-----  
Date: Wed, 31 Dec 1997 15:23:04 GMT  
From: adams@chuck.dallas.sgi.com (Chuck Adams)  
To: qrp-1@Lehigh.EDU  
Subject: [34104] FOX Year End Scores  
Message-ID: <199712311523.PAA01830@chuck.dallas.sgi.com>

1997-1998 FOXHUNT SUMMARY SHEET  
December 31, 1997

Total Number of Q's = 1,665



# FOX SCORES

| CALL   | NAME  | STATE  | # of Q's      |
|--------|-------|--------|---------------|
| N0UR   | Jim   | MN     | 69 + 84 = 153 |
| KA80KH | Rich  | KY     | 87 + 64 = 151 |
| W7QQQ  | Jack  | AZ     | 65 + 70 = 135 |
| K50I   | Tim   | NM     | 69 + 54 = 123 |
| K8CV   | Walt  | MI     | 59 + 49 = 108 |
| N8VAR  | Ron   | OH     | 25 + 28 = 53  |
| N9DD   | Tom   | IN     | 90            |
| W5FN   | Tim   | TX     | 81            |
| K1MG   | Mike  | CA     | 81            |
| AE9K   | Brian | WI     | 65            |
| NQ7K   | Mike  | AZ     | 65            |
| AB7TK  | Randy | ID     | 64            |
| K0EVZ  | Doc   | MN     | 62            |
| N0TFI  | Jess  | CO     | 58            |
| VE7CQK | Paul  | Canada | 57            |
| KI7MN  | Bob   | AZ     | 56            |
| W3CV   | Scott | MD     | 49            |
| W2UX   | Gary  | SC     | 48            |
| NR3Z   | Marty | PA     | 47            |
| KS4L   | Randy | AL     | 42            |
| W03B   | Bob   | CA     | 42            |
| N0TFI  | Jess  | CO     | 35            |

```

+-----+
+
+
+
+
+-----+

```

## HUNTERS SCORES

```

W0CH(23) W0T(12) K0EVZ(21) KB0PTE(7) KB0ROL(6) W0CLR(6) N0HJ(9)
K0SU(4) N0TFI(14) KB0ZDF(3) N0UR(6) K0CD KB0PI K0GJX(3)
AA0ZZ(10) W00Q(4) W0RW(11) KM0II(2) W0HEP WM0Q K0FRP K0HUU
KQ0I(7) WB0ROQ(2) WB0CLD(4) KR0I NF0R NI0A(12) KB0VIJ N0BS
W0KW WB0ATR W0RSP(2) KI0KY KI0II AB0GO W0DC

```

```

K1MG(24) K10J(22) W1GM(3) AA1MY(6) N10CJ(3) N1QQV(10) KA1AXY WA1QVM(6)
KC1FB(8) W1LP/MM(5) AK1P(6) N1FN K1CL(2) K1RA K1XS(2) W1HUE
N1TP(5) K1NY KD1JV

```

```

K2VCO(20) W2UX(8) N2BRT AA2PF(10) W2PFS(6) N2TNN(5) N2TO K2VNM(4)
N2VPK(5) K2SJB(6) WZ2T(4) WJ2V(2) AA2VK N2SMH(3) N2GO(7)

```

KJ2V N2WF(4) WA2TDL N2APB(3) N2TSQ N2DBD KG2IM(3) WB2GAI  
KA2PQY KF2PH(2) AA2YK KV2X W2JEK KG2H

+

KJ3V(12) N3KFL N3XRV(6) KA3WMJ(9) KA3EAJ(8) W03B(9) WD3P(5) WV3J(4)  
N3YSI(7) N3NLT N3CEU W3PM(3) NR3Z(2) KT3A(2) KD3FG NF3I  
W3MWY(3) W3GEO KA3K(2) N3YRI W3PNL(2) N3JF

+

N4ROA(16) WB4EXW(15) K4CGY(3) WA4CMI(3) N4DD AE4IC(5) KK4KF(4) KS4L(5)  
N4JS(6) N4UY(2) KC4MHM K4GT(6) K4WZ(4) N4DD N4S0(8) KU4AF(8)  
WS4S(2) WD4MSM(12) AE4GX K4PYM KS4HQ(2) AC4HF KU4LC N4PK(3)  
WA4DAI(4) N4KV(3) W4YNG N4AC WA4HHP NZ4E N4CD AA4GA N4XDW

+

N5JI(23) AB5UA(24) W5FN(22) K5ZTY(19) KQ5U(18) K5JHP(18) W5TFB(17)  
K5ON(17) K5UP(17) N5LU(16) W5HNS(16) KK6MC/5(15) KK5X0(4)  
N5ALO(6) W5XE K5F0(9) AA5C0(2) K5W0(6) W5JH K5TZY(2) W5SP  
W5ZH KC5AI W5MN(3) NA5K(5) W5JAY(4) W5SNS W5VB0(3) KC5AIK(2)  
K5AO W5SB(12) KA5T(15) K5JUC KK5KU KJ5VW K5OI(18) NA5N  
K5LE(6) WA5WHN(2) N5ZN(6) KE5TC(3) AF5Z(6) WA5YFY(2) K5NZ(5)  
K5ID(9) AC5IE(2) N5JKY(4) AA5TA(9) AC5II(3) K5VUU(6) N5JIN  
KI5IB W5USJ K5GQ(3) N5PYB KC5FMZ KI5G

+

N6XU(22) WE6W(16) N6WG(14) W6ZH(14) W6BAB(14) K6VNX(11) K06KA(7)  
W6SIY(5) WA6NAE(12) W6EMD(5) K6RPN AA6R(2) KF6CTA(4) W6SU(9)  
AC6KW(9) KN6YD KI6OY(2) K6MW(3) WI6I W6EMT(3) N6VZ(7) WA6GER  
AD6AY(4) AC6LA(12) W6EV(3) N6GA(2) KD6VIO(3) WA6HHQ W6SV N6KR  
K6MR K6YR N6MM(8) W6KI N6ZS NC6LA K6UNX

+

NQ7X(25) AB7TT(23) KU7Y(22) N7VE(22) W7QQQ(16) AB7TK(15) WW7Y(8)  
AB7ST(9) N7CTJ(4) W7SSM(8) N7GS(11) NQ7K(6) KI7MN(10)  
N7CQR(3) AB7MY(18) KJ7YN W7GVN(5) AB7OA(7) KG7PV N7KT(12)  
KA7NOC(5) AB7GO WJ7H(2) W7JDZ(2) N7MFB(2) K7DBV N7XJW(8)  
KA7OKH N7IR(2) WA7JEG W7UQ WA7SSA KB7MBI N7IL

+

KA8OKH(16) K8CV(10) KC8EPA WQ8RP W8KC(6) K8DD(3) KB8MCZ WD8KQY(2)  
KB8AZ WA8GHZ(4) WB8E W8SFF(2) W8RU(4) WK8S N8ET(2) K8NWD(2)  
N8CW N8VAR(3) WB8NYV K8FF W8RO

+

NF9K(5) WA9YLB W9UQB(8) N9DD(12) KB9IUA(7) N9KW(11) W9KVF(5) WA9PWP(9)  
AF9T(7) W9DZ NN9K WB9HFK(5) W9UQV AE9K N9AW WB9LKC N9WAQ K9IA  
AA9L(2) KB9GEG

+

AL7FS(2)

+

VE3ELA(13) VE3JC(7) VE3SP(3) VE5RC(16) VE5WF(4) VE6GK(3) VE7CQK(11)  
VE6NJK(5)

Chuck Adams K5FO CP-60  
<http://reality.sgi.com/adams> adams@sgi.com

-----  
Date: Wed, 31 Dec 1997 10:36:59 -0500  
From: Zack Lau <zlau@arrl.org>  
To: qrp-1@Lehigh.EDU  
Subject: [34105] Re: SPRAT and More Received\!  
Message-ID: <34AA669B.2EB6@arrl.org>  
Mime-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Wonder how many cards big guns like W3TS and AA2U get?--they  
must work hundreds of G-QRP club members every year--Zack W1VT

-----  
Date: Wed, 31 Dec 97 09:35:41 CST  
From: minie@ed11a.msfc.nasa.gov (minie)  
To: qrp-1@Lehigh.EDU  
Subject: [34106] The Fuzz  
Message-ID: <9712311535.AA00965@ed11a.msfc.nasa.gov>

Bob Follett (AB7ST) reported on a congressional bill  
which would involve local governments in Ham and CB  
law enforcement. Bob expressed some reservations. My  
own are much stronger than Bob's appear to be. People,  
we don't want this! I can see the special taxes on gear  
already, not to mention the problems associated with  
competence, individual favors, etc. Ignore it Bob -  
maybe it will go away. 73, Hal, W4YNG.

-----  
Date: Wed, 31 Dec 1997 08:39:19 -0700  
From: wa5whn@juno.com  
To: qrp-1@Lehigh.EDU  
Subject: [34107] 3K00G1D {Spread Spectrum & QRP}  
Message-ID: <19971231.084123.2662.1.wa5whn@juno.com>

qrp-1ers,

Just a thought thread, we will need to look at the definition for QRP again, in the very near future. Spread spectrum modulation techniques will require us to redefine, what we call QRP 5.0 watts dc output or 10 watts PEP won't fit this definition. With a 15 watt transmitter, using spread spectrum modulation techniques, spreading out over 3.0 KHz with less than 3.0 seconds transmission times, I can be under 5.00 wattSeconds. Is that the new definition ? Less than 5.00 wattSeconds ? It's just a thought, and open for discussion.

Also, since some of us are into watching sunspots,  
check out the following URL;

<http://www.hooked.net/~tvs/eyes/>

Not bad for a group of NorCal Amateur Astronomers.

72...Jay, WA5WHN DM65qd Albuquerque, NM USA

-----  
Date: Wed, 31 Dec 1997 10:51:15 EST  
From: Shephed <Shephed@aol.com>  
To: qrp-1@Lehigh.EDU  
Subject: [34108] SKN  
Message-ID: <36d8fb98.34aa69f6@aol.com>  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

Hello all.  
I'm new to this group, and soon to be QRP'er.

Lets not forget us slower people in the Novice bands, we need love and practice too. :-)

72, 73, and Happy New Year's

Dan Shepherd  
N8VZU  
<http://members.aol.com/shephed/n8vzu.htm>

-----  
Date: Tue, 23 Dec 1997 11:02:00 -0600  
From: Bob Tellefsen-CNSE97 <Bob\_Tellefsen-CNSE97@email.mot.com>  
To: qrp-1@Lehigh.EDU

Subject: [34109] Straight Key Night

Message-ID: <M2356557.001.2ar90.1.971231162109Z.CC-MAIL\*/OU=LMPCC4/OU=ILBB/  
PRMD=MOT/ADMD=MOT/C=US/@MHS>

Just a quick reminder. Tonight, Wednesday night local time, is the annual Straight Key Night where we all dig out our old straight keys and try to carry on a QSO the way we did when we were young!

Hope to hear a lot of QRP stations on tonight calling CQ SKN.

See you on 40.

72 and Happy New Year,  
Bob N6WG and Ol' Kenwood

-----  
Date: Wed, 31 Dec 1997 11:59:20 -0500  
From: VE3JC John <jbcumming@wwdc.com>  
To: qrp-l@Lehigh.EDU  
Subject: [34110] 5 W CW vs. 100 W SSB  
Message-ID: <34AA79E8.841@wwdc.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Our Canadian amateur radio magazine [called, surprisingly enough, "The Canadian Amateur"] has a regular column "CW Today". In the Dec issue, the author had a brief item on "QRP: what does it mean to the CW op?", in which he suggested "if ... the priority is conversational CW with a widely distributed community of friends, the 100 W and larger antennas will make this goal achievable at a lower frustration level than QRP will."

I would suggest that, under identical propagation and antenna conditions, a 5W CW signal is easily as effective as a 100 W ssb signal. Therefore, to suggest that 5W CW is not a sound choice for 'conversation with a widely distributed community of friends' is equivalent to suggesting a 100W ssb setup is less than adequate for maintaining skeds and ragchews!

Does anyone have any thumbnail calculations, comments, or references which would support (or refute) my statement, which I could include in a response to the author of the article?

It's sometimes frustrating that, in spite of much evidence to the contrary, the myth that "you can't DO that with QRP!" still prevails.

I know there were a number of posts recently with regard to inherent efficiency advantage of CW vs SSB. Should have kept them, I

guess (or I better browse the archives !)

Best wishes to all for a safe and prosperous 98.

72 es 73 de VE3JC

\*\*\*\*\*

VE3JC - JOHN CUMMING

192 WELLINGTON ST. DELAWARE, ON CANADA, N0L 1E0

-----  
Date: Wed, 31 Dec 1997 11:26:32 -0600  
From: David Heintzleman <bchurch@megavision.com>  
To: qrp-l@Lehigh.EDU  
Subject: [34111] TenTec  
Message-ID: <34AA8048.6167@megavision.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

where do i find/subscribe to any Ten-Tec reflector? thanks, Dave K8BBM

-----  
Date: Wed, 31 Dec 1997 08:01:02 +0000  
From: Leon Heller <leon@lfheller.demon.co.uk>  
To: D2250077@infotrade.co.uk  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [34112] Re: Rx Mixers Query  
Message-ID: <8KkLUEA+ufq0Ew0o@lfheller.demon.co.uk>  
MIME-Version: 1.0

In message <01BD15B7.6B619E40@default>, John Anthony Reynolds  
<D2250077@infotrade.co.uk> writes

>Hi Guys,

> I am about to construct a receiver for use mainly on 7Mhz and  
>would appreciate comments as to which is the best mixer to use:

>(a) SBL-1 Ring Mixer

>or

>(b) SL6440 Double balanced Mixer

>

> The problem over here in Europe is the excessive amount of BC cross mod  
>and my old TRIO TS120 suffers badly on 7Mhz, hence the need to improve  
>matters somewhat.

> I have both devices but am unsure as to which will perform better.

>Incidentally, is it best to use a square wave local oscillator injection when  
>using the ring mixer?

> I look forward to any comments  
>

The SL6440 is no longer manufactured.

It has the advantages that it isn't as fussy about termination as the SBL-1, and it needs less LO power. It doesn't cover such a wide range as the SBL-1, and needs quite a lot of components around it, for optimum performance. Diode mixers work best with square wave osc. input. Why not use a modular approach, and try both devices?

73, Leon

--

Leon Heller: [leon@lfheller.demon.co.uk](mailto:leon@lfheller.demon.co.uk) <http://www.lfheller.demon.co.uk>  
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424  
See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850  
DDS system - schematic and software.

-----  
Date: Wed, 31 Dec 1997 09:25:11 -0800 (PST)  
From: Monte Stark <[ku7y@sage.dri.edu](mailto:ku7y@sage.dri.edu)>  
To: Steven Weber <[kd1jv@moose.ncia.net](mailto:kd1jv@moose.ncia.net)>  
Cc: Low Power Amateur Radio Discussion <[qrp-1@Lehigh.EDU](mailto:qrp-1@Lehigh.EDU)>  
Subject: [34113] Re: K1MG's calculations: mi/watt  
Message-ID: <[Pine.SUN.3.90.971231092127.11018B-100000@vortex](mailto:Pine.SUN.3.90.971231092127.11018B-100000@vortex)>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 31 Dec 1997, Steven Weber wrote:

-----snip-----

> Amazingly, earlier this evening, I was toying with the idea of placing a  
> watt meter at the antenna feed point and relaying the data back down the  
> coax. I'm sure it can be done and might be interesting. Gonna think about  
> that one for a while...

Hi Steve,

One thing to do with coax that has been laying around for awhile is to put a good dummy load on the rig and set the power to say 10w. Then connect the coax to the rig and the same dummy load to the end of the coax and measure the power.

(Both power measurments need to be taken at the dummy load.)

You can find bad coax this way without much work!

I have always wanted to put the final amp at the antenna!

cul,

73, Ron,        SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

-----

Date: Wed, 31 Dec 1997 12:12:40 -0500  
From: "duane" <duane@flinet.com>  
To: "qrp-l group" <QRP-L@Lehigh.EDU>  
Subject: [34114] web page  
Message-ID: <01bd160f\$4cd3a060\$2a1a0ed0@ab4be.earthlink.net>  
MIME-Version: 1.0  
Content-Type: multipart/alternative;  
          boundary="-----\_NextPart\_000\_0016\_01BD15E5.63FD9860"

This is a multi-part message in MIME format.

-----=\_NextPart\_000\_0016\_01BD15E5.63FD9860  
Content-Type: text/plain;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

hey guy's I update my site but I'm still looking for electronic  
parts suppliers to add to my page. So send them in via personal  
email not to the list.

thanks

duane@flinet.com  
<http://www.flinet.com/~duane/ham/ham.html>

-----=\_NextPart\_000\_0016\_01BD15E5.63FD9860  
Content-Type: text/html;  
          charset="iso-8859-1"  
Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">  
<HTML>



<HEAD>

<META content=3Dtext/html; charset=3Diso-8859-1 =

http-equiv=3DContent-Type>

<META content=3D'"MSHTML 4.71.1712.3"' name=3DGENERATOR>

</HEAD>

<BODY bgColor=3D#ffffff>

<DIV><FONT color=3D#000000 size=3D2>hey guy's I update my site but I'm =  
still looking=20

for electronic</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2>parts suppliers to add to my page. =  
So send them=20

in via personal</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2>email not to the list.</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2>&nbsp;thanks</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2></FONT>&nbsp;</DIV>

<DIV><FONT color=3D#000000 size=3D2><A=20

href=3D"mailto:duane@flinet.com">duane@flinet.com</A></FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2><A=20

href=3D"http://www.flinet.com/~duane/ham/ham.html">http://www.flinet.com/=  
~duane/ham/ham.html</A></FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2></FONT>&nbsp;</DIV></BODY></HTML>

-----=\_NextPart\_000\_0016\_01BD15E5.63FD9860--

Date: Wed, 31 Dec 1997 12:16:15 -0500

From: "Wilford D. Lindsey" <70511.3041@compuserve.com>

To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ"  
<70511.3041@compuserve.com>

Subject: [34115] FS:Norcal 40a QRP Rig

Message-ID: <199712311227\_MC2-2D9D-55A3@compuserve.com>

MIME-Version: 1.0

Content-Transfer-Encoding: 7bit

Content-Type: text/plain; charset=us-ascii

Content-Disposition: inline

Gang:

Have the following QRP rig FS:

Norcal 40a. Fully loaded with KC-1 combination keyer/frequency unit.  
Also has battery holders inside the top of the rig. Makes it completely  
portable and self-contained. Excellent condition w/manual. Price =  
\$125.00. Price includes shipping in CONUS.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V Corsair I Yaesu 900AT Sierra Norcal 40a SW-40 49er  
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D Matchbox GAP  
TNT/2 Windom SLV/W6MMA G5RV Timewave 599zx Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 12:16:11 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ"  
<70511.3041@compuserve.com>  
Subject: [34116] FS:QRP Gear  
Message-ID: <199712311227\_MC2-2D9D-55A2@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Gang:

Time for shack-clearing. Some of you may have some Christmas cash :-).  
Plus FYBO and other QRP contests are coming soon. Therefore I am  
offering the following for sale. Prices include manual and shipping to  
CONUS.

1. MFJ-418 Morse Code Tutor. Excellent condition, complete with manual.  
\$63.00.
2. MFJ-212 Matchmaker. Device uses \*sound\* to help you pre-tune those  
tiny/delicate finals without applying power. \$75.00.
3. MFJ-722 "Optimizer" CW/SSB/Notch Filter. \$45.00.
4. Autek QF-1 Audio Filter. \$48.00.
5. MFJ-564 Iambic Paddle. Key pads are triangular, red-coloured. I  
\*believe\* these were built by Bencher. Excellent condition. \$55.00.
6. Ramsey "Twins"--seperate xmtr and rcvr for 40 Metres. Assembled,

ready-to-go. \$20.00 for both (will not separate).

Interested?--just let me know :-).

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqc 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V Corsair I Yaesu 900AT Sierra Norcal 40a SW-40 49er  
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D Matchbox GAP  
TNT/2 Windom SLV/W6MMA G5RV Timewave 599zx Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 09:28:37 -0800 (PST)  
From: Stanley Wilson <microres@crl.com>  
To: Leon Heller <leon@lfheller.demon.co.uk>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [34117] Re: Rx Mixers Query  
Message-ID: <Pine.SUN.3.91.971231092542.23949A-100000@crl8.crl.com>  
Mime-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Active vs. Passive

I seem to remember in KK7B's articles on the T2/R2 using the SBL that the end result was a very high noise figure. I would think that an active mixer would not have the same problem. ?

de stan ak0b

-----  
Date: Wed, 31 Dec 1997 10:45:22 -0700  
From: "Bob Follett" <bfollett@ditell.com>  
To: "QRP-L Group" <qrp-l@Lehigh.EDU>  
Subject: [34118] RE: Local Enforcement of FCC Rules  
Message-ID: <01bd1613\$ddf5b8e0\$LocalHost@newmicronpc>  
MIME-Version: 1.0  
Content-Type: multipart/alternative;  
boundary="-----\_NextPart\_000\_024F\_01BD15D9.3196E0E0"

This is a multi-part message in MIME format.

-----=\_NextPart\_000\_024F\_01BD15D9.3196E0E0

Content-Type: text/plain;  
charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

Gang:

Others and Minie wrote:

<<Bob Follett (AB7ST) reported on a congressional bill which would involve local governments in Ham and CB law enforcement. Bob expressed some reservations. My own are much stronger than Bob's appear to be. People, we don't want this! I can see the special taxes on gear already, not to mention the problems associated with competence, individual favors, etc. >>

First, I quoted the wrong source. It was in Jan 98 Monitoring Times, not = 73 (How could I get debates on flouridation & UFO's mixed up with = Monitoring Times?)

Second, the report on the bills are vague, but both S.608 and H.R.2612 = exempts anyone holding any class of FCC license from local enforcement = -- including us hams. They both specifically target high power CB = equipment and out-of-band CB operation (Freebanders). Apparently, both = bills also cover an appeal process to the FCC to ensure that local = authorities haven't exceeded their authority in a particular = enforcement. FCC will be required to provide technical assistance to = local authorities. Chances of passage? Not a clue.

Third, I, like most/all of you, would prefer to have the FCC do all = enforcing. However, it seems like a cold day in hell before Congress = will give them any money to do so. The FCC is in no position to do any = routine enforcement today, and as a result, Freebanders are thumbing = their noses at everybody. =20

I counted 6 separate non-ham QSOs on the cw portion of 10M yesterday in = just a few minutes of monitoring. Ugly! Unfortunately, most were = neighbors to the South of the boarder, so this discussion has no = relevance for them. Tuning just a few Khz below 28Mhz revealed a "wall" = of U.S. QSOs, however. Since many are running high power with = questionable linears, and no regard for spectral purity, they DO create = problems for us because in the minds of most citizens, they don't = know/don't care about the difference between CB and Ham operation -- = they just want the interference in their tv, stereo, false teeth, =

whatever, to go away. So, yes, local enforcement is risky, but (On My = Soapbox) if these bills become law, we amateurs should volunteer to help = local enforcement by providing technical assistance and maybe we could = have our cake and eat it too. =20

Finally, Wayne Green did take time out from his health diatribes to = state that the FCC reported new General and Extra class licenses show a = drop of 97% in the last two years. Worthy of another discussion, if = true.

73, and have a great new year!! Bob

-----  
Bob Follett AB7ST, QRP-L # 129, NorCal, ARCI, 10-10, ARS  
2861 Estates Dr. VOICE: 801.649.6457  
Park City, UT 84060 E-mail: bfollett@ditell.com=20

-----=\_NextPart\_000\_024F\_01BD15D9.3196E0E0

Content-Type: text/html;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">

<HTML>

<HEAD>

<META content=3Dtext/html; charset=3Diso-8859-1 =

http-equiv=3DContent-Type>

<META content=3D'"MSHTML 4.71.2110.0"' name=3DGENERATOR>

</HEAD>

<BODY bgColor=3D#ffffff>

<DIV><FONT color=3D#000000 size=3D2>Gang:</FONT></DIV>

<DIV><FONT color=3D#000000 size=3D2></FONT>&nbsp;</DIV>

<DIV><FONT size=3D2>Others and Minie wrote:</FONT></DIV>

<DIV><FONT size=3D2></FONT>&nbsp;</DIV>

<DIV><FONT size=3D2>&lt;&lt;Bob Follett (AB7ST) reported on a =

congressional=20

bill<BR>which would involve local governments in Ham and CB<BR>law =

enforcement.=20

Bob expressed some reservations. My<BR>own are much stronger than Bob's =

appear=20

to be. People,<BR>we don't want this! I can see the special taxes on=20

gear<BR>already, not to mention the problems associated =

with<BR>competence,=20

individual favors, etc. &gt;&gt;</FONT>&nbsp;</DIV>

<DIV><FONT size=3D2></FONT>&nbsp;</DIV>

<DIV><FONT size=3D2>First, I quoted the wrong source. It was in Jan 98 =

Monitoring=20

Times, not 73 (How could I get debates on flouridation & UFO's mixed =  
up with=20

Monitoring Times?)/FONT></DIV>

<DIV><FONT size=3D2></FONT>&nbsp;</DIV>

<DIV><FONT size=3D2>Second, the report on the bills are vague, but both =  
S.608 and=20

H.R.2612 exempts anyone holding any class of FCC license from local =  
enforcement=20

-- including us hams.&nbsp; They both specifically target high power CB=20  
equipment and out-of-band CB operation (Freebanders).&nbsp; Apparently, =  
both=20

bills also cover an appeal process to the FCC to ensure that local =  
authorities=20

haven't exceeded their authority in a particular enforcement.&nbsp; FCC =  
will be=20

required to provide technical assistance to local authorities.&nbsp; =  
Chances of=20

passage?&nbsp; Not a clue.</FONT></DIV>

<DIV><FONT size=3D2></FONT>&nbsp;</DIV>

<DIV><FONT size=3D2>Third, I, like most/all of you, would prefer to have =  
the FCC=20

do all enforcing.&nbsp; However, it seems like a cold day in hell before =

Congress will give them any money to do so. The FCC is in no position to =  
do any=20

routine enforcement today, and as a result, Freebanders are thumbing =  
their noses=20

at everybody.&nbsp; </FONT></DIV>

<DIV><FONT size=3D2></FONT>&nbsp;</DIV>

<DIV><FONT size=3D2>I counted 6 separate non-ham QSOs on the cw portion =  
of 10M=20

yesterday in just a few minutes of monitoring.&nbsp; Ugly!&nbsp; =  
Unfortunately,=20

most were neighbors to the South of the boarder, so this discussion has =  
no=20

relevance for them.&nbsp; Tuning just a few Khz below 28Mhz revealed a=20  
&quot;wall&quot; of U.S. QSOs, however.&nbsp; Since many are running =  
high power=20

with questionable linears, and no regard for spectral purity, they DO =  
create=20

problems for us because in the minds of most citizens, they don't =  
know/don't=20

care about the difference between CB and Ham operation -- they just want =  
the=20

interference in their tv, stereo, false teeth, whatever, to go =  
away.&nbsp; So,=20

yes, local enforcement is risky, but (On My Soapbox) if these bills =  
become law,=20



The better job you can do with your 5w of power, the better sig you will (should) have.

I just don't see any need to make the power issue complicated.

We would then need to figure power based on code speed! That's a can of worms that I wouldn't want to fool with! :-)

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

-----  
Date: Wed, 31 Dec 1997 12:51:52  
From: Steven Weber <kd1jv@moose.ncia.net>  
To: D2250077@infotrade.co.uk  
Cc: qrp-l@Lehigh.EDU  
Subject: [34120] Re: Rx Mixers Query  
Message-ID: <3.0.1.16.19971231125152.22e73b44@mailhost.ncia.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 10:09 PM 12/30/97 -0000, you wrote:

>Hi Guys,

> I am about to construct a receiver for use mainly on 7Mhz and  
>would appreciate comments as to which is the best mixer to use:

>(a) SBL-1 Ring Mixer

>or

>(b) SL6440 Double balanced Mixer

>

John,

By all means, use the SBL-1 for the first mixer. Use the SL6440 for the product detector.

But most importantly, build a good band pass filter for the front end. A three section Cohn filter would be ideal. You want to keep as much out-of-band crud out of the mixer as possible in the first place.

Use high side injection for the Local Oscillator (ie, LO= IF+RF in), this will reduce the chances of harmonics of the LO generated by the mixer



producing images.

A simple way to generate square waves and drive the SBL-1 is with a 74HC00 logic gate. Connect a 100K resistor between the output and input of one gate. Input L0 signal through a 0.01 ufd cap. The driving signal needs to be about 500 mv p-p min. Connect the output of this gate to the inputs of the remaining three and parrarell the outputs. Now drive the SBL-1 from the parrarelled gate outputs through a 51 ohm resistor. Works FB

Good luck to you.

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

-----  
Date: Wed, 31 Dec 97 10:52:31 MST  
From: af852@rgfn.epcc.Edu (William R Colbert)  
To: qrp-l@Lehigh.EDU, gqrp-l@blacksheep.org  
Subject: [34121] Happy New Year  
Message-ID: <9712311752.AA26631@rgfn.epcc.Edu>

Not qrp but: Happy New Year to all and a Happy Hogmany to all so inclined - have a safe first footing.

Ray

--

Ray Colbert, W5XE  
00TC 3618, SOWP 1064M  
El Paso, Tx (Far West Texas)  
(also: v31xe@dzdn.com)

-----  
Date: Wed, 31 Dec 1997 09:53:26 -0800 (PST)  
From: Monte Stark <ku7y@sage.dri.edu>  
To: QRP-L <qrp-l@Lehigh.EDU>  
Subject: [34122] MI Contest  
Message-ID: <Pine.SUN.3.90.971231094948.11123B-100000@vortex>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

Just a little heads up that the ARRL RTTY Roundup is also this weekend.

There will be some QRM but don't let it bother you. Just be sure to watch for QRP stations all over and not just around the "normal" QRP frequencies.

So be sure to get on the air and have some fun.

cul,

73, Ron,        SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....  
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....  
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

-----

Date: Wed, 31 Dec 1997 09:57:13 -0800  
From: "Michael A. Gipe" <mgipe@reliablemeters.com>  
To: <ddonald@sprintmail.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [34123] Re: K1MG's calcs & UHF  
Message-ID: <199712311746.LAA30634@multi13.netcomi.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

40 dB per decade is  $r^{-4}$ , which, as Dave says, is a good number to use when estimating UHF signal coverage. Sounds like Denver experiences values equivalent to free space. What does that say about the quality of life in Colorado?

This might be a good time to start a thread on antennas and field strength as it applies to the FCC RF exposure rules. Any experts out there?

Mike K1MG

-----

> From: ddonald@sprintmail.com  
> Actually we have a good idea how to make educated guesses. The  
> average pathloss is around 40 db/decade. That is if you have a -50  
> dbm at 1 mile you would have -90dbm at 10 miles. This figure works  
> in the suburbia. If the air is dry like denver its around 20

> db/decade which makes my fellow RF engineers really work at reusing  
> frequencies there (compared to Minneapolis.

-----  
Date: Wed, 31 Dec 1997 09:54:12 -0800  
From: "Earl S. Mead" <k6esmead@pacbell.net>  
To: wa5whn@juno.com  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [34124] Re: 3K00G1D {Spread Spectrum & QRP}  
Message-ID: <34AA86C4.40E04A71@pacbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

wa5whn@juno.com wrote:

>  
> qrp-lers,  
>  
> Just a thought thread, we will need to look at the definition for  
> QRP  
> again, in the very near future. Spread spectrum modulation techniques  
> will require us to redefine, what we call QRP 5.0 watts dc output or  
> 10  
> watts PEP won't fit this definition. With a 15 watt transmitter, using  
> spread spectrum modulation techniques, spreading out over 3.0 KHz  
> with  
> less than 3.0 seconds transmission times, I can be under 5.00  
> wattSeconds. Is that the new definition ? Less than 5.00 wattSeconds ?  
> It's just a thought, and open for discussion.  
>  
> Also, since some of us are into watching sunspots,  
> check out the following URL;  
>  
> <http://www.hooked.net/~tvs/eyes/>  
>  
> Not bad for a group of NorCal Amateur Astronomers.  
>  
> 72...Jay, WA5WHN DM65qd Albuquerque, NM USA

Hi Jay and qrp-lers:

A very interesting posting and certainly worth debating. And, in that respect, I feel it is an unnecessary "gilding of the lily" as we're asking for more than we need.

Amateur transmitter output power is measured as peak power only while the the power is emitted. When no power is being emmitted, nothing is

measured or even considered.

You suggest adding a time element to get an average power reading. This requires a certain precise length of total time when a transmitter is cycled through two states: emitting power and not emitting power. As a general rule, amateurs don't have the test equipment required to do power on/off versus time measurements.

You would need test equipment to actually key the transmitter (into a non-radiating load of course) for a precise period of time and then leave the transmitter in an un-keyed state for a precise length of time. All the while measuring both power/no power states as one continuous time period. The test instrument would then calculate and indicate the average power of the two states as one measurement. (It takes more time to explain the necessary procedure than to do it; whew!)

This not a new concept (and you graciously didn't say or imply that it was) as it's been used in radar and other similar installations for years to calculate average power. It's also used in the new FCC emission standards we have to comply with starting Jan. 1, 1998.

--

73s, CUL, Earl, K6ESM

The pessimist curses the darkness in the tunnel; the optimist thinks a light is at the end of the tunnel; the opportunist finds the light and turns it on; the explorer sees railroad tracks; the developer builds a station; the entrepreneur sells tickets for the train; the consumer buys a ticket and rides the train. Ah, the wonder of it all.

<http://www.ns.net/~NHRC>

-----  
Date: Thu, 01 Jan 1998 02:02:22 +0800  
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>  
To: qrp@pandora.lugs.org.sg  
Subject: [34125] Inverted V effect on dipoles  
Message-ID: <34aa88ae.pandora@pandora.lugs.org.sg>

Hi,

I've had quite a few suggestions to use the inverted V to get a better match for my dipole. Unfortunately, I do not have the option of raising the feedpoint over the legs to form the inverted V.

So, my question is if it is possible to achieve the inverted V effect of lowered feedpoint impedance without actually resorting to physical reorientation of the dipole. For example, would it be better if I used conductive material (ie. wire) to hold up the ends of the antenna, as opposed to nylon? Would this approximate the effect of lowered legs of the inverted V?

Thanks.

73 de 9V1ZV Daniel

--

```
+-----+-----+
| Daniel Wee | daniel@pandora.lugs.org.sg |
| 9V1ZV      |                               |
| QRP-L #667 | 9V1ZV@amsat.org                       |
+-----+-----+
```

-----

Date: Wed, 31 Dec 1997 12:06:58 -0600  
From: "George T. Baker" <w5yr@swbell.net>  
To: k6esmead@pacbell.net  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>  
Subject: [34126] Re: 3K00G1D {Spread Spectrum & QRP}  
Message-ID: <34AA89C2.F90A89AD@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Interesting observations, but really all you have to do is to set the cw keying to a 50% duty ratio and then send dits for a time (at least long enough to get stable readings). A wattmeter connected to the dummy load will then show the time-average power output of the system under 50% duty cycle. Of course, just taking half of the key-down power output will give the same result!

Earl S. Mead wrote:

```
>
> wa5whn@juno.com wrote:
> >
> > qrp-lers,
> >
> > Just a thought thread, we will need to look at the definition for
> > QRP
> > again, in the very near future. Spread spectrum modulation techniques
> > will require us to redefine, what we call QRP 5.0 watts dc output or
> > 10
> > watts PEP won't fit this definition. With a 15 watt transmitter, using
> > spread spectrum modulation techniques, spreading out over 3.0 KHz
> > with
> > less than 3.0 seconds transmission times, I can be under 5.00
> > wattSeconds. Is that the new definition ? Less than 5.00 wattSeconds ?
> > It's just a thought, and open for discussion.
```

> >  
> > Also, since some of us are into watching sunspots,  
> > check out the following URL;  
> >  
> > <http://www.hooked.net/~tvs/eyes/>  
> >  
> > Not bad for a group of NorCal Amateur Astronomers.  
> >  
> > 72...Jay, WA5WHN DM65qd Albuquerque, NM USA  
>  
> Hi Jay and qrp-lers:  
> A very interesting posting and certainly worth debating. And, in that  
> respect, I feel it is an unnecessary "gilding of the lily" as we're  
> asking for more than we need.  
> Amateur transmitter output power is measured as peak power only while  
> the the power is emitted. When no power is being emmitted, nothing is  
> measured or even considered.  
> You suggest adding a time element to get an average power reading. This  
> requires a certain precise length of total time when a tranmitter is  
> cycled through two states: emitting power and not emmitting power. As a  
> general rule, amateurs don't have the test equipment required to do  
> power on/off versus time measurements.  
> You would need test equipment to actually key the transmitter (into a  
> non-radiating load of course) for a precise period of time and then  
> leave the transmitter in an un-keyed state for a precise length of time.  
> All the while measuring both power/no power states as one continuous  
> time period. The test instrument would then calculate and indicate the  
> average power of the two states as one measurement. (It takes more time  
> to explain the necessary procedure than to do it; whew!)  
> This not a new concept (and you graciously didn't say or imply that it  
> was) as it's been used in radar and other similar installations for  
> years to calculate average power. It's also used in the new FCC emmision  
> standards we have to comply with starting Jan. 1, 1998.  
> --  
> 73s, CUL, Earl, K6ESM  
> The pessimist curses the darkness in the tunnel; the optimist thinks  
> a light is at the end of the tunnel; the opportunist finds the light  
> and turns it on; the explorer sees railroad tracks; the developer  
> builds a station; the entrepreneur sells tickets for the train; the  
> consumer buys a ticket and rides the train. Ah, the wonder of it all.  
>  
> <http://www.ns.net/~NHRC>

--  
73, George  
Amateur Radio W5YR  
QRP-L #1373  
AutoPOWER Systems

Fairview, TX

-----  
Date: Wed, 31 Dec 1997 13:06:46 -0800  
From: Randy Hargenrader <randyh@harksystems.com>  
To: qrp-1@Lehigh.EDU  
Subject: [34127] Re:obQRP: portable, wireless....  
Message-ID: <34AAB3E6.9FAD5E23@harksystems.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Laura H. wrote...

> obQRP: portable, wireless, battery operated equipment - small,  
> light, rugged, simple, highly effective, with excellent  
> DC-to-RF power efficiency - is all the rage, professionally.  
> Us QRP folks should be in the thick of it. We're not. Why?  
> ...laura

Hmmm, OK I'll bite...

For starters, that paragraph sounds a lot like the radios we  
qrper's use everyday. Using an outdated mode (CW) I  
communicated this evening with stations in MN, CA, AZ, TX, CO,  
and FL from SC using a radio that is powered from a 9 volt battery.

If what you mean is a wrist-size 10 bander  
with all modes, then I'd have to say that I don't have training in  
anything that would get me close to designing something like that.  
Perhaps I missed the contribution you've made to further our hobby  
into the next level of technical expertise that is prevelant in  
the cutting edge of telecommunications.

Another point is that ham radio is a hobby for most of us, financed  
by discretionary funds while commerce uses business to drive the  
changes. Hams my be part of the commerce solution as the technologists  
that help design the cutting edge systems, but they go home and  
put their new PCS phone (that was given to them at work) in the charger  
and go outside and piddle with their wire antenna's in the back yard.  
All the while being careful not to step in the little  
vegetable garden nearby...

--

73, Randy WJ4P  
Knightlites QRP-L #296

-----  
Date: Wed, 31 Dec 1997 10:11:08 -0800  
From: "Michael A. Gipe" <mgipe@reliablemeters.com>

To: <kd1jv@moose.ncia.net>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [34128] Re: K1MG's calculations: mi/watt  
Message-ID: <199712311759.LAA31154@multi13.netcomi.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Steve --

Yes, I suspect that most of the radiated energy came from the braid on the 3 ft of coax and the metal case of the rig. Might also be interesting to try a stack of ferrite beads on the coax.

Mike K1MG

-

> From: Steven Weber <kd1jv@moose.ncia.net>  
> You did say you used a 3 ft piece of coax to the dummy load, so wonder how  
> much signal was also being radiating/ received by the connecting cable?  
> Guess next time you'll have to find the adaptors to connect the load right  
> to the back of the rig :-)

-----

Date: Wed, 31 Dec 1997 11:11:29 -0700 (MST)  
From: Joe Gervais <vole@primenet.com>  
To: azqrp@dancris.com  
Cc: qrp-1@Lehigh.EDU  
Subject: [34129] Re: Pixie/40-9er test  
Message-ID: <199712311811.LAA13745@usr06.primenet.com>  
Content-Type: text

Kent (AB70A) wrote:

> Larry, KA5T, writes:  
> > Well Finally got a Pixie contact tonight...NQ7RP  
>  
> Hurrah! The pixie \*can\* work skywave! It was mostly a fruitless nite;  
> heard Brian, w5vbo, working slowly across the band. My pixie doesn't have  
> a vxo, so I could certainly hear him, and had to wait until he moved across

Congrats!



> Also, was listening to three shortwave stations...at 6:30, one of them had  
> an interview on the sex life of snakes, one was playing the nutcracker, and  
> the other was a spanish interview.

Good grief, sounds like some sort of Nils dream.... :-)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It happens sometimes. People just explode. Natural causes." -Repo Man

-----  
Date: Wed, 31 Dec 1997 10:13:12 -0800  
From: "Michael A. Gipe" <mgipe@reliablemeters.com>  
To: <daniel@pandora.lugs.org.sg>, "Low Power Amateur Radio Discussion" <qrp-  
l@Lehigh.EDU>  
Subject: [34130] Re: 1/2-wave dipole --- 50ohm feed  
Message-ID: <199712311802.MAA31395@multi13.netcomi.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

-----  
> From: W. Daniel, 9V1ZV <daniel@pandora.lugs.org.sg>  
> ... feeding a  
> 1/2-wave dipole with a 50ohm coax?  
>... I was unable to get 1:1 SWR no matter how I trimmed the thing. Then I  
> realized that the impedance should be closer to 75ohms.  
>  
> So, I am asking myself what can be done to fix this.

Turn on the rig and call CQ.

Mike K1MG

-----  
Date: Fri, 26 Dec 1997 08:27:54 -0400 (AST)  
From: wp4jxd@prtc.net (wp4jxd)  
To: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>  
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [34131] Re: 1/2-wave dipole --- 50ohm feed  
Message-ID: <Pine.LNX.3.95.971226082439.518B-1000000@pentagon>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Daniel:

How far from 1:1 are you? My first 40m dipole gave me at best 1:1.3 which was very good. If you use an inverted V you'll get the beloved 1:1 swr but your radiation pattern would somewhat change. Experiment and enjoy.

Regards,

Pablo Luis

-----  
Pablo Luis Robles            "Without LINUX OS you just have a \$2,000  
BOX 3063                    scientific calculator... unleash the power  
Yauco, P.R. 00698           of your PC get LINUX NOW!"

e-mail:                    wp4jxd@prtc.net  
WP4JXD HOME PAGE:    <http://www.geocities.com/capecanaveral/hangar/3613>  
-----

On Wed, 31 Dec 1997, W. Daniel, 9V1ZV wrote:

> Hi,  
>  
>     I was wondering if there would be problems arising from feeding a  
> 1/2-wave dipole with a 50ohm coax? I am wondering about this when I noticed  
> that I was unable to get 1:1 SWR no matter how I trimmed the thing. Then I  
> realized that the impedance should be closer to 75ohms.  
>  
>     So, I am asking myself what can be done to fix this. Will the following  
> work?  
>  
> 1. Balun  
>  
> 2. Extending one leg of the dipole  
>  
> 3. Adjusting the length of the feed  
>  
>     I'd appreciate any feedback, thanks and have a Happy New Year you all.  
>  
> 73 de 9V1ZV Daniel  
> --

```
> +-----+
> | Daniel Wee | daniel@pandora.lugs.org.sg |
> | 9V1ZV      |                             |
> | QRP-L #667 | 9V1ZV@amsat.org           |
> +-----+
>
>
```

-----

Date: Thu, 1 Jan 1998 00:31:39 -0600  
From: "Chuck Smith" <csmith@ionet.net>  
To: <n3fel@juno.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [34132] How low can you go?  
Message-ID: <199712311832.MAA23189@mail.ionet.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Just purchased a GAP Titan DX ...it arrived yesterday.  
The instructions indicate that the antenna will function effeciently even  
mounted  
on a 1 1/4" pipe rising only a foot above ground level.  
I really would prefer to mount it on the roof top. Technical expertise,  
please!  
Just how much less effecient is a vertical mounted say 6 feet off the  
ground on a  
pipe as opposed to one lifted to 20 feet off the ground a la roof top?  
Does mounting height substantially change the radiation angle, gain, or  
radiation pattern of a vertical antenna. Antenna will be used for QRP and  
DX.  
Tnx fer any opinions, comments, or advice on this subject.  
73 de KM5KR (Happy New Year!)  
--Chuck

-----

```
> From: Howard D Rubin <n3fel@juno.com>
> To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
> Subject: Re: 1/2-wave dipole --- 50ohm feed
> Date: Wednesday, December 31, 1997 6:30 AM
>
> W. Daniel,
>
> You might try raising the center feedpoint to form about a 90 angle with
> the ground plane. The effect is to lower the feedpoint impedance to
> about 50 ohms and should improve your match. Refer to "Inverted Vee"
```

> antennas.  
>  
> Howard Rubin, N3FEL  
>  
> On Wed, 31 Dec 1997 17:24:25 +0800 "W. Daniel, 9V1ZV"  
> <daniel@pandora.lugs.org.sg> writes:  
> >Hi,  
> >  
> > I was wondering if there would be problems arising from feeding a  
> >1/2-wave dipole with a 50ohm coax? I am wondering about this when I  
> >noticed  
> >that I was unable to get 1:1 SWR no matter how I trimmed the thing.  
> >Then I  
> >realized that the impedance should be closer to 75ohms.  
> >  
> > So, I am asking myself what can be done to fix this. Will the  
> >following  
> >work?  
> >  
> >1. Balun  
> >  
> >2. Extending one leg of the dipole  
> >  
> >3. Adjusting the length of the feed  
> >  
> > I'd appreciate any feedback, thanks and have a Happy New Year you  
> >all.  
> >  
> >73 de 9V1ZV Daniel  
> >--  
> >+-----+-----+  
> >| Daniel Wee | daniel@pandora.lugs.org.sg |  
> >| 9V1ZV | |  
> >| QRP-L #667 | 9V1ZV@amsat.org |  
> >+-----+-----+  
> >  
> >  
>

-----  
Date: Wed, 31 Dec 1997 11:32:33 -0700 (MST)  
From: Joe Gervais <vole@primenet.com>  
To: qrp-l@Lehigh.EDU  
Subject: [34133] Re: my turn to dance  
Message-ID: <199712311832.LAA15182@usr06.primenet.com>

Howdy,

Chuck (K5F0) wrote:

>

> 'cuz if you had stayed around later you would have  
> caught PS7YG and several others.

Well I was there, found PS7YG and proceeded to not work him for at least an hour. ;-) I knew I was in \*big\* trouble when the PS7 got all excited and sent "DL ONLY PSE", then proceeded to do his \*own\* happy dance - seems it was his first German.

Now while I was very happy for the fellow, he now had a taste of German RF and was thirsting for more. By the time I left I think he was on DL #3. Unless I took a Concorde over to Frankfurt, I wan't going to be working Xavier on 30m tonight. :)

But that's alright. As long as a fellow ham got to do the Happy Dance (particularly a DX Happy Dance), all is well with the world. :)

\*Way\* behind on email here - Jay, I'm catching up, I swear. ;-)

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It's 106 miles to Chicago, we've got a full tank of gas, half a pack of cigarettes, it's dark, and we're wearing sunglasses."  
"Hit it!" -The Blues Brothers

-----  
Date: Wed, 31 Dec 1997 13:42:49 -0500  
From: "kc1di/dave" <elim@ime.net>  
To: <bchurch@megavision.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [34134] Re: TenTec  
Message-ID: <004601bd161b\$e5e414e0\$25c65ad1@default>  
MIME-Version: 1.0  
Content-Type: text/plain;  
charset="us-ascii"  
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: David Heintzleman <bchurch@megavision.com>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Date: Wednesday, December 31, 1997 12:22 PM  
Subject: TenTec

>where do i find/subscribe to any Ten-Tec reflector? thanks, Dave K8BBM  
>  
>

Hi Dave,

go to the following web sight it will tell you all you need to know about  
the Ten-Tec  
Reflector..  
<http://www.contesting.com/tentecfaq.htm>

73 hpy new year  
dave kc1di

-----  
Date: Wed, 31 Dec 1997 10:42:45 -0700  
From: Kory Hamzeh <kory@avatar.com>  
To: csmith@ionet.net, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [34135] Re: How low can you go?  
Message-ID: <3.0.5.32.19971231104245.00999520@ns1.avatar.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I had a Gap Titan and I can tell you from personal experience that it  
works much better ground mounted than elevated.

Happy New Year Dear QRP'ers!

Kory

At 12:31 AM 1/1/98 -0600, Chuck Smith wrote:  
>Just purchased a GAP Titan DX ...it arrived yesterday.  
>The instructions indicate that the antenna will function effeciently even  
>mounted

>on a 1 1/4" pipe rising only a foot above ground level.  
>I really would prefer to mount it on the roof top. Technical expertise,  
>please!  
>Just how much less effecient is a vertical mounted say 6 feet off the  
>ground on a  
>pipe as opposed to one lifted to 20 feet off the ground a la roof top?  
>Does mounting height substantially change the radiation angle, gain, or  
>radiation pattern of a vertical antenna. Antenna will be used for QRP and  
>DX.  
>Tnx fer any opinions, comments, or advice on this subject.  
>73 de KM5KR (Happy New Year!)  
>--Chuck

-----  
Date: Wed, 31 Dec 1997 18:43:30 -0000  
From: "Juan Antonio Lopez Delgado, EA8QJ, EA-QRP # 196" <jalopezd@arrakis.es>  
To: <qrp-1@Lehigh.EDU>  
Subject: [34136] The propagation is opening!  
Message-ID: <01bd161b\$fdd58980\$LocalHost@default>  
MIME-Version: 1.0  
Content-Type: text/plain;  
        charset="iso-8859-1"  
Content-Transfer-Encoding: 7bit

Hello listers,

I just worked the following STNs on 14 MHz, +/- 14.060 KHz on CW.

W1VT/QRP, Zack  
KA10X/QRP, Wayne  
W4/G0FSP, JOHN

QTR was +/- 18:00z  
TRVR INDEX QRP+ Serial nr 1416  
PWR 5 WATTS OUT  
ANT TH3MK3 (old but work too)  
Bearing 302 degrees from IL18UL Santa Cruz de Tenerife City, Canary Islands

With Zack I tested with 2 W and we had then a long solid QS0.

The propagation is opening!. 72 to all.

Juan Antonio Lopez, EA8QJ, EA-QRP # 196, QRP-L # 1137, G # 9055  
EA-QRP Club - Relaciones y Desarrollo  
mailto:jalopezd@arrakis.es

Homepage EA-QRP Club <http://www.eaqrp-c.arrakis.es>

-----  
Date: Wed, 31 Dec 1997 13:47:50 -0500  
From: W2MY & W2MBY <n2mnn@spacegate.com>  
To: QRP-L@Lehigh.EDU  
Subject: [34137] Some DX on 15 M  
Message-ID: <34AA9356.5333@spacegate.com>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Gang,

I was tuning around on the 15 M Novice band when I heard ZL2000. I ran to my dad thinking and hoping that it was some part of New Zealand. I was right. I used the SPLIT to match up on the people he was talking to. After about 8 tries he answered, "W2MBY de ZL2000". I got all exited and talked to him for a short while. I was the only one who told him my age, so when he came back he gave his too (76). Now I'm hoping that Hawaii will jump in there too. I had to use 100 Watts this time as he was only 449, but yesterday I got HP1AC on 15 M with 5 W. Pretty good DX for me from New Jersey.

Does anyone have the CBA or manager for ZL2000?

72,

John, W2MBY N/T Fox  
11 Years old

-----  
Date: Wed, 31 Dec 1997 10:49:49 -0800 (PST)  
From: Stanley Wilson <microres@crl.com>  
To: qrp-l@Lehigh.EDU  
Subject: [34138] Microphone question  
Message-ID: <Pine.SUN.3.91.971231104652.18429A-1000000@crl7.crl.com>  
Mime-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

The current crop of solid state rigs all appear to use a 8 pin DIN connector.



Is the wiring the same for ICOM, YAESU and KENWOOD mic connector ?

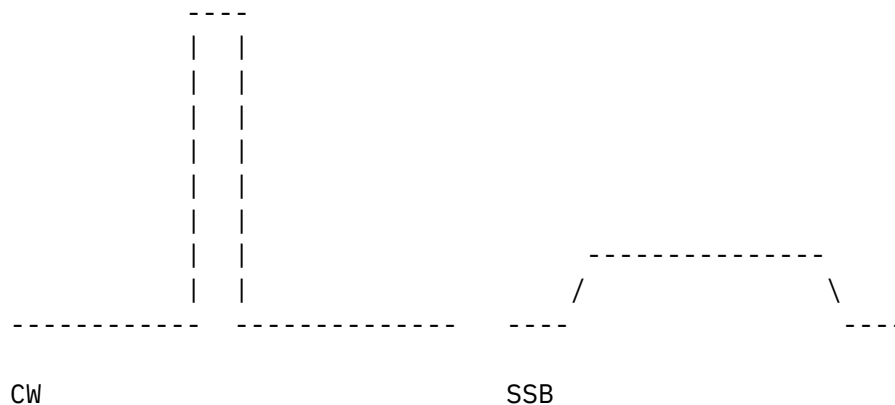
What is the audio level output of the current microphones or what does the new rigs require ?

What is a normal 500R mike ?

thanks, stan ak0b  
microres@crl.com

-----  
Date: Wed, 31 Dec 1997 15:04:30 -0500 (EST)  
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>  
To: VE3JC John <jbcumming@wwdc.com>  
Cc: qrp-l <qrp-l@Lehigh.EDU>  
Subject: [34139] Re: 5 W CW vs. 100 W SSB  
Message-ID: <Pine.LNX.3.95.971231143920.10712C-1000000@w3eax.umd.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Think of a receiver as a bucket. IF you spread one "power unit" into a signal over a given frequency range which the receiver is able to "catch," the receiver will catch it. Narrow the bandwidth of the signal, and the receiver will still be able to catch it. Let's look at a power spectral density, in "power units per Hz."



If the receiver receives no noise, and none is generated internally, the two modes work equivalently well.

However, let's now add noise to the picture. What is noise? Anything that is "unwanted," which implies "other than the signal you're trying to receive." It could be a hiss, another nearby signal, a heterodyne, or

something internally generated in the mixing stage. At any rate, you generally don't want it.

So now we'll add "noise power" in the receiver's passband in the form of another signal.

What would you do to get rid of it? FILTER! Since CW has a bandwidth of 100 Hz at moderate speeds, you could filter down to 100 Hz bandwidth quite comfortably. Unfortunately, SSB sounds quite awful if filtered to much less than 1.8 kHz.

What if the noise is a broadband noise?



Guess what? the SSB signal is below the noise, and the CW signal isn't.

By how much? Assume 100 Hz for CW, 2 kHz for SSB, and one power unit.  
Power Spectral Density: CW =  $P / 100 \text{ Hz}$  SSB =  $P / 2000 \text{ Hz}$

Gain =  $10 \log \text{CW/SSB} = 10 \log 20 = \text{about } 13 \text{ db.}$

So what does it mean? You can still detect a CW signal 13 db "longer" than you can an SSB signal of equal, total signal power.

Conversely, in order to "give up" this advantage, you'd have to drop your CW signal by 13 db - or a factor of 20 - like from 100 to 5 watts.

In the clear, 100w is 100w. When the chips are down, narrow bandwidth wins. No, I'm not getting into Spread Spectrum debates.

On Wed, 31 Dec 1997, VE3JC John wrote:

> Our Canadian amateur radio magazine [called, surprisingly  
> enough, "The Canadian Amateur"] has a regular column "CW Today". In the  
> Dec issue, the author had a brief item on "QRP: what does it mean to the

> CW op?", in which he suggested "if ... the priority is conversational CW  
> with a widely distributed community of friends, the 100 W and larger  
> antennas will make this goal achievable at a lower frustration level  
> than QRP will."  
> I would suggest that, under identical propagation and  
> antenna conditions, a 5W CW signal is easily as effective as a 100 W ssb  
> signal. Therefore, to suggest that 5W CW is not a sound choice for  
> 'conversation with a widely distributed community of friends' is  
> equivalent to suggesting a 100W ssb setup is less than adequate for  
> maintaining skeds and ragchews!  
> Does anyone have any thumbnail calculations, comments, or  
> references which would support (or refute) my statement, which I could  
> include in a response to the author of the article?  
> It's sometimes frustrating that, in spite of much evidence to  
> the contrary, the myth that "you can't DO that with QRP!" still  
> prevails.  
> I know there were a number of posts recently with regard to  
> inherent efficiency advantage of CW vs SSB. Should have kept them, I  
> guess (or I better browse the archives !)  
> Best wishes to all for a safe and prosperous 98.  
> 72 es 73 de VE3JC  
> \*\*\*\*\*  
> VE3JC - JOHN CUMMING  
> 192 WELLINGTON ST. DELAWARE, ON CANADA, N0L 1E0  
>  
>

-----  
Date: Wed, 31 Dec 1997 14:08:31 EST  
From: ab5uacw@juno.com (Clifton W Sikes)  
To: qrp-l@Lehigh.EDU  
Subject: [34140] SKN  
Message-ID: <19971231.130257.4823.0.ab5uacw@juno.com>

I'm going to be different, and try 80m at first. I will be around 3.560,  
on the OHR 400 and J-38. Come on down and keep me company.

Happy New Year to all,

Clif

Clifton Sikes AB5UA QRP-L #478  
Earlsboro, Ok.

ab5uacw@juno.com

-----  
Date: Wed, 31 Dec 1997 13:16:20 -0600  
From: "Junius B. Fox" <w5hir@mail.phoenix.net>  
To: qrp-1@Lehigh.EDU  
Subject: [34141] step motors & Ledex  
Message-ID: <3.0.1.32.19971231131620.00831320@mail.phoenix.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

I am a bit confused about step motors, I have seen some with just about three or four leads coming out of the motor, then I have seen a massive amount of wires from others. Does anyone have a source of information regarding step motors. Surplus buys are great, but if you don't know what's in the box DOC, who cares what the price is???

Now question #2. I want to know how the Ledex motor driven switches are wired. We used them in lots of Military equipment design, but my job in the design never encompassed these little puppies.

Any help will be appreciated.

Foxy w5hir@mail.phoenix.net  
w5hir@mail.phoenix.net

"success is recognizing a dead horse and burying it with the least ceremony"

-----  
Date: Wed, 31 Dec 1997 13:20:33 -0600  
From: OJ Quarles <k10j@swbell.net>  
To: qrp-1@Lehigh.EDU  
Subject: [34142] FS: OHR400  
Message-ID: <34AA9B01.7B8F@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

For sale: OHR-400 with built in keyer, 20-30-40-80 meters, DD1 digital display. Works great, looks great. \$350 shipped conus.  
OJ-K10J  
HOUSTON, TX.

-----  
Date: Wed, 31 Dec 1997 13:23:16 -0600  
From: "George T. Baker" <w5yr@swbell.net>  
To: daniel@pandora.lugs.org.sg  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [34143] Re: Inverted V effect on dipoles  
Message-ID: <34AA9BA4.8AF6945C@swbell.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Daniel, I think that you picking at some very small nits here. There is little if any practical reason to attempt to lower or alter the feedpoint impedance of a dipole being fed with 50-ohm coax.

First, the driving point impedance of the antenna is highly unlikely to be anywhere very close to 75 ohms. So much depends upon the height above ground, the presence of nearby objects, etc. that it is virtually impossible to calculate the impedance.

So, just hook up the coax to the antenna and transmitter and see if it will load properly. If you can load your transmitter to the same plate/collector current at resonance with the antenna connected as you can when connected to a dummy antenna, then there is no need to worry about the SWR in the coax.

At 40 meters, the SWR could be very high with very little actual power loss in the coax, assuming that it is not 30 years old and been left out in the sun and rain.

The only criterion is whether or not you can get your transmitter properly loaded. If not, then use an "antenna tuner" to modify the impedance seen at the driving point end of the coax to a value that your transmitter will accept. It need not be exactly 50 ohms resistive.

If you can find it, get a copy of "Reflections" by Walter Maxwell, W2DU. This is a reprint of the series of articles that he published in QST back in the 70's plus some new material. Reading that will give you a much better understanding of the effects of SWR, loading, etc. Required reading for anyone really interested in antenna systems.

W. Daniel, 9V1ZV wrote:

>  
> Hi,  
>  
> I've had quite a few suggestions to use the inverted V to get a better  
> match for my dipole. Unfortunately, I do not have the option of raising the

> feedpoint over the legs to form the inverted V.  
>  
> So, my question is if it is possible to achieve the inverted V effect of  
> lowered feedpoint impedance without actually resorting to physical  
> reorientation of the dipole. For example, would it be better if I used  
> conductive material (ie. wire) to hold up the ends of the antenna, as  
> opposed to nylon? Would this approximate the effect of lowered legs of the  
> inverted V?

>  
> Thanks.  
>  
> 73 de 9V1ZV Daniel

> --  
> +-----+-----+  
> | Daniel Wee | daniel@pandora.lugs.org.sg |  
> | 9V1ZV | |  
> | QRP-L #667 | 9V1ZV@amsat.org |  
> +-----+-----+

--  
73, George  
Amateur Radio W5YR  
QRP-L #1373  
AutoPOWER Systems  
Fairview, TX

-----  
  
Date: Wed, 31 Dec 1997 14:38:11 -0500  
From: olyellr@iglou.com  
To: qrp-l@Lehigh.EDU  
Subject: [34144] Re: 5 W CW vs. 100 W SSB  
Message-ID: <1.5.4.32.19971231193811.00695d40@iglou.com>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 03:04 PM 12/31/97 -0500, you wrote:  
>Think of a receiver as a bucket. IF you spread one "power unit" into  
>a signal over a given frequency range which the receiver is able to  
>"catch," the receiver will catch it. Narrow the bandwidth of the signal,  
>and the receiver will still be able to catch it. Let's look at a power  
>spectral density, in "power units per Hz."

etc., etc.....in response to:

>> Our Canadian amateur radio magazine [called, surprisingly  
>> enough, "The Canadian Amateur"] has a regular column "CW Today". In the

>> Dec issue, the author had a brief item on "QRP: what does it mean to the  
>> CW op?", in which he suggested "if ... the priority is conversational CW  
>> with a widely distributed community of friends, the 100 W and larger  
>> antennas will make this goal achievable at a lower frustration level  
>> than QRP will."

Hello Scott and John!

John here is some more of Scott's excellent info. I saved it from another reflector (CW) for information and occasionally "ammo" when needed..HIHI!

Thanks, Scott for both informative posts. Happy New Year to you both, and all on the list.

Mike, ke4hlu (info below)

From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>  
To: Michael Pupeza <mpupeza@csolve.net>  
cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, cw@qth.net  
Subject: [CW] CW/SSB = 13 db, by mathematics  
Sender: owner-cw@qth.net

Assume you have a constant signal power of "k," in any mode, at the receiver (the transmitter on the other end puts out a constant power).

Assume you have a noise power that's a constant level "m" at the receiver. In other words, the same noise level exists at all frequencies within the range you're receiving.

CW: 100 Hz @ 20 wpm. Minimum bandwidth for receiver = 100 Hz.

Signal power = k, noise power =  $m \times 100 \text{ Hz}$

Signal/noise =  $k / 100m$

SSB: 2000-3000 Hz. Minimum practical receiver BW = 2,000 Hz.

Signal power = k, noise power =  $m \times 2000 \text{ Hz}$ .

Signal/noise =  $k / 2000m$

AM: 6000 Hz. Minimum practical receiver BW = 6,000 Hz.

Signal power = k, noise power =  $m \times 6000 \text{ Hz}$ .

Signal/noise =  $k / 6000m$

So what does this mean? Mathematically, through the ability to use progressively narrow filtering at the receiver, you can reduce the amount of noise power entering the receiver's IF stages, making the signal you want to receive stand out from the "other stuff," which we'll call noise.

How much improvement is achievable?

CW vs SSB -  $k/100m$  vs.  $k/2000m$

gain =  $10 \log (P2/P1) = 10 \log 2000/100$

db gain (CW vs. SSB) = 13 db

CW vs AM -  $k/100m$  vs.  $k/6000m$  -

gain =  $10 \log (P2/P1) = 10 \log 6000/100$

db gain (CW vs. AM) = 17 db

(and of course, it's probably higher because 50% of signal is spent in non-information-bearing carrier)

\* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 \*  
\* 6m 80 grids on 8w \* DXCC WAS WAC \* QRP-L #147 \* QRP ARCI #9054 \*  
\* Charter member, Maryland Milliwatters \* W3-VK on 3w mobile CW \*  
\*\*\* 301-549-1022 h / 301-982-1015 w \*\* Life is one big hamfest \*\*\*

\*\*\*\*\*  
KE4HLU  
FISTS #4139  
QRP-L #1395

"Accuracy transcends speed...  
...Courtesy at all times"

\*\*\*\*\*

-----  
Date: Wed, 31 Dec 1997 12:50:53 -0700 (MST)  
From: Joe Gervais <vole@primenet.com>  
To: n2mnn@spacegate.com  
Cc: qrp-l@Lehigh.EDU  
Subject: [34145] Re: Some DX on 15 M



Message-ID: <199712311950.MAA20597@usr06.primenet.com>

Howdy!

John (W2MBY) wrote:

>

> ... After about 8 tries he answered, "W2MBY de ZL2000"....

> ... yesterday I got HP1AC on 15 M with 5 W ...

Way to go John! Man, and the sunspots are barely even warmed up yet! This'll be the first solar peak I've ever experienced, so I think we're in for a very fun few years. Just think, a few watts, a dipole in the trees on your dayhike/camping trip, 10/12/15m bursting with 599+ DX....

Life is good. Life is very good. :) HP1AC is a tried-and-true QRPer too - no problem getting a QSL from him. Great guy.

Back to my Sierra modules and email backlog...

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"And then you must cut down the mightiest tree in the forest with... A HERRING!"

-----

Date: Wed, 31 Dec 1997 13:07:58 -0700

From: Jess Gypin <jessqrp@concentric.net>

To: csmith@ionet.net

Cc: qrp-1@Lehigh.EDU

Subject: [34146] Re: How low can you go?

Message-ID: <34AAA61E.4348@concentric.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Chuck Smith wrote:

>

> Just purchased a GAP Titan DX ...it arrived yesterday.

> The instructions indicate that the antenna will function effeciently even

> Just how much less effecient is a vertical mounted say 6 feet off the  
> ground on a  
> pipe as opposed to one lifted to 20 feet off the ground a la roof top?  
Hi there,

I have been running the Gap Titan for about 3 years and have found that it does NOT matter if it is roof, tower or ground mounted. The Gap Titan is an assymetrical 1/2 wave dipole. Therefore, it is not dependent on ground radials for efficiency. The closer that the antenna is mounted to the gorund, the more chance that there might be for ground loss, but in theory it should not be anough for you to worry about. The real key with any vertical is whether or not the antenna is in the CLEAR and if there is anything in the near field that will effect the antenna. Mount the antenna as high and as in the clear as you can and you will be pleased. If you are lazy like me and like having the antenna close to the ground for maintanance, then just stick it on a post as high as you can and go for it. The only tip that I can give you is to make sure that you take the time to tune the bottom "counter poise" for 40 meters right.

Best

--

Jess N0TFI <><  
<http://www.concentric.net/~jessqrp>  
qrp-1 #1232 CQC #92 1997 Fox

-----  
Date: Wed, 31 Dec 1997 14:14:34 -0600  
From: Kevin Muenzler <wb5rue@stic.net>  
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, "'vole@primenet.com'"  
<vole@primenet.com>  
Subject: [34147] RE: Some DX on 15 M  
Message-ID: <01BD15F6.6C3FCAA0@muenzlerk.uthscsa.edu>  
MIME-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"  
Content-Transfer-Encoding: 7bit

On vole@primenet.com, Joe Gervais[SMTP:vole@primenet.com] wrote:

>  
> Howdy!  
>  
> John (W2MBY) wrote:  
> >  
> > ... After about 8 tries he answered, "W2MBY de ZL2000"....  
> > ... yesterday I got HP1AC on 15 M with 5 W ...  
>

> Way to go John! Man, and the sunspots are barely  
> even warmed up yet! This'll be the first solar  
> peak I've ever experienced, so I think we're in  
> for a very fun few years. Just think, a few watts,  
> a dipole in the trees on your dayhike/camping  
> trip, 10/12/15m bursting with 599+ DX....  
>  
> Life is good. Life is very good. :) HP1AC is a  
> tried-and-true QRP'er too - no problem getting a  
> QSL from him. Great guy.  
>  
> Back to my Sierra modules and email backlog...  
>  
> Cheers de AB7TT,  
>  
> -Joe, vole@primenet.com, AZ ScQRP'ers (Phoenix)  
>  
> "And then you must cut down the mightiest tree in the  
> forest with... A HERRING!"  
>  
>

Welcome to REAL Ham radio Joe! I can remember my first peak, it was back in 1979 and 1980. I remember calling CQ DX with my HW-16 (not qrp) and hearing WA5YAR. I could just barely copy him. I almost didn't respond but I did anyway because I needed W5 on 15 meters for WAS. Boy was I surprised when he gave his location as 6 degrees 50 minutes South, 85 degrees 27 minutes East -- right in the middle of the Indian Ocean! (and there was much rejoicing, yeah...) Shortly thereafter I built a little rig that was in 73 magazine. It was basically an oscillator with an antenna connected. It worked on 6 volts and drew about 50ma. I had my WAC using it by the end of the peak, mostly on 15 meters. It's a great, relatively low-noise band with either dead or wide open characteristics. I just hope that 10 meters lights up like it did in 1990/1991!

72/73

Kevin, WB5RUE  
wb5rue@stic.net

Linears? We don't need no stinking linears!

-----  
Date: Wed, 31 Dec 1997 13:05:16 -0700  
From: "Charles L. Stackhouse" <cstack@cyberhighway.net>  
To: "Wesley Jenks" <jenksw@vivanet.com>, "Vince Bedient" <vbedient@vivanet.com>,

"Terry Jeppson" <drjobg@safelink.net>, "Sam G. Hoskins" <SamGHos@aol.com>,  
"Sally Stackhouse" <Stackhouse\_S@Deerfield.edu>, "Robert O. Jensen"  
<rjensen@lynnnet.com>, "Rick Ayers" <rayers@cce.cornell.edu>,  
Subject: [34148] Change of email address  
Message-ID: <199712312035.PAA100562@nss4.cc.Lehigh.EDU>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Happy New Year to ALL

Our new email address is       cstack@safelink.net

-----  
Date: Wed, 31 Dec 1997 12:44:36 -0800 (PST)  
From: "S. Lee" <slee@u.washington.edu>  
To: "Junius B. Fox" <w5hir@mail.phoenix.net>  
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>  
Subject: [34149] Re: step motors & Ledex  
Message-ID: <Pine.A41.3.95b.971231115537.59154A-100000@homer10.u.washington.edu>  
MIME-Version: 1.0  
Content-Type: TEXT/PLAIN; charset=US-ASCII

Yes, there is good introductory info on stepper motors at the following  
web site: <http://www.eio.com/stepindx.htm>

Another very good source for stepper motor info can be found at:  
<http://www.doc.ic.ac.uk/~ih/doc/stepper/>

There's a Ledex web page that directs one to this web site:  
<http://www.compumotor.com>

Go to: <http://www.compumotor.com/catalog/oem/oemtbl3.htm>  
for the data on OEM stepper motors. These addresses are good as of today.

For stepper motor drivers we use the SAA-1042V being made by Motorola.  
For those who prefer to roll their own stepper motor driver the details  
can be found at: <http://www.cs.uiowa.edu/~jones/step/circuits.html>  
Enjoy!! de AB7HI, Stephen Lee, Federal Way, WA  
slee@u.washington.edu

-----  
On Wed, 31 Dec 1997, Junius B. Fox wrote: <snipped by AB7HI>

>  
>       Does anyone have a source of information regarding step motors.  
>  
>       Now question #2. I want to know how the Ledex motor driven  
>       switches are wired. Any help will be appreciated.

>  
> Foxy w5hir@mail.phoenix.net  
> w5hir@mail.phoenix.net

-----  
Date: Wed, 31 Dec 1997 15:37:34 -0500  
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>  
To: QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "Doc W.D. Lindsey/K0EVZ" <70511.3041@compuserve.com>  
Subject: [34150] Note re MFJ Paddles FS  
Message-ID: <199712311540\_MC2-2DA5-9752@compuserve.com>  
MIME-Version: 1.0  
Content-Transfer-Encoding: 7bit  
Content-Type: text/plain; charset=us-ascii  
Content-Disposition: inline

Gang:

Found out from someone--Chuck Adams himself :-)--that in fact the paddles I am offering are \*not\* made by Bencher. Somewhere I heard that...but tain't so! Anyway, this set needs a new home.

72/73,

--Doc/K0EVZ qrp-l 861 norcal 2050 cqz 414 ARS 311 FISTS 3868 mn-qrp 19  
nj-qrp 69 ak/qrp 139 AR QRP 73 ARCI 9398 ARRL QRP WAS 44/42  
DXCC 73/44 Grid EN34 <>< FOX Total 12/30/97 = 21. A 1997 FOX.

-----  
Omni V Corsair I Yaesu 900AT Sierra Norcal 40a SW-40 49er  
Mercury Paddles Emtech ZM-1 MFJ 259 MFJ 941D Matchbox GAP  
TNT/2 Windom SLV/W6MMA G5RV Timewave 599zx Autek QF-1 RS DSP-40

"Things should be as simple as possible, but no simpler"--A. Einstein

-----  
Date: Wed, 31 Dec 1997 15:53:48 -0500  
From: "George F. Allgood" <k4pym@carol.net>  
To: <qrp-l@Lehigh.EDU>  
Subject: [34151] Re: QRP-L digest 955  
Message-ID: <199712312055.PAA23397@mulder.carol.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1

Content-Transfer-Encoding: 7bit

My nominations for the top three GOLDEN GASSERS OF 1997!

1. The NO CB Phantom beacon on 10 Meter CW! Certainly, the people for whom the NO CB message is intended are not going to hear or heed it. They can't copy Morse code! :^(

2. The posting about how people should tune up their rigs on FM as a means of reducing QRM ! FABULOUS FLATULENCE!

3. The NEWSLETTER article (rather widespread this summer) which reminded all the good buddies that "proper protocol" on 2 meters requires one to say "break" for an emergency. For a BIGGER emergency, the article says we should say "break break". My GAWD... if you hear someone say "BREAK BREAK BREAK"....I guess that means A R M A G E D D O N ! :-0

Happy New Year to all! Without this list...I'd have to go back to watching TV with the family! :^)

george k4pym

-----  
Date: Wed, 31 Dec 97 20:53:41 UT  
From: "LLOYD DEEM" <WH6CDU@classic.msn.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [34152] RE: obQRP: portable, wireless....  
Message-ID: <UPMAIL18.199712312106070120@classic.msn.com>

AMEN

73,72 wh6cdu

-----  
From: owner-qrp-l@Lehigh.EDU on behalf of Randy Hargenrader  
Sent: Wednesday, December 31, 1997 3:06 PM  
To: Low Power Amateur Radio Discussion  
Subject: Re:obQRP: portable, wireless....

Laura H. wrote...

> obQRP: portable, wireless, battery operated equipment - small,  
> light, rugged, simple, highly effective, with excellent  
> DC-to-RF power efficiency - is all the rage, professionally.  
> Us QRP folks should be in the thick of it. We're not. Why?  
> ...laura

Hmmm, OK I'll bite...

For starters, that paragraph sounds a lot like the radios we qrpers use everyday. Using an outdated mode (CW) I communicated this evening with stations in MN, CA, AZ, TX, CO, and FL from SC using a radio that is powered from a 9 volt battery.

If what you mean is a wrist-size 10 bander with all modes, then I'd have to say that I don't have training in anything that would get me close to designing something like that. Perhaps I missed the contribution you've made to further our hobby into the next level of technical expertise that is prevelant in the cutting edge of telecommunications. Another point is that ham radio is a hobby for most of us, financed by discretionary funds while commerce uses business to drive the changes. Hams my be part of the commerce solution as the technologists that help design the cutting edge systems, but they go home and put their new PCS phone (that was given to them at work) in the charger and go outside and piddle with their wire antenna's in the back yard. All the while being careful not to step in the little vegetable garden nearby...

--

73, Randy WJ4P  
Knightlites QRP-L #296

-----  
Date: Wed, 31 Dec 97 20:43:34 UT  
From: "LLOYD DEEM" <WH6CDU@classic.msn.com>  
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>  
Subject: [34153] RE: 5 W CW vs. 100 W SSB  
Message-ID: <UPMAIL18.199712312106000807@classic.msn.com>

"Let's compare a 100-watt signal to a 5-watt one. For example, if the other station gives you a signal report of 20 db or s9 when you are using 100 watts, he should give you a report of 7 db over s9 when you QRP to 5 watts" (W1FB's QRP NOTEBOOK). I think that this says it all power is relevant to antennas used at both ends and the skill of the operator.

73 wh6cdu Lloyd

-----  
From: owner-qrp-l@Lehigh.EDU on behalf of VE3JC John  
Sent: Wednesday, December 31, 1997 10:59 AM  
To: Low Power Amateur Radio Discussion  
Subject: 5 W CW vs. 100 W SSB

Our Canadian amateur radio magazine [called, surprisingly enough, "The Canadian Amateur"] has a regular column "CW Today". In the Dec issue, the author had a brief item on "QRP: what does it mean to the

CW op?", in which he suggested "if ... the priority is conversational CW with a widely distributed community of friends, the 100 W and larger antennas will make this goal achievable at a lower frustration level than QRP will."

I would suggest that, under identical propagation and antenna conditions, a 5W CW signal is easily as effective as a 100 W ssb signal. Therefore, to suggest that 5W CW is not a sound choice for 'conversation with a widely distributed community of friends' is equivalent to suggesting a 100W ssb setup is less than adequate for maintaining skeds and ragchews!

Does anyone have any thumbnail calculations, comments, or references which would support (or refute) my statement, which I could include in a response to the author of the article?

It's sometimes frustrating that, in spite of much evidence to the contrary, the myth that "you can't DO that with QRP!" still prevails.

I know there were a number of posts recently with regard to inherent efficiency advantage of CW vs SSB. Should have kept them, I guess (or I better browse the archives !)

Best wishes to all for a safe and prosperous 98.

72 es 73 de VE3JC

\*\*\*\*\*

VE3JC - JOHN CUMMING

192 WELLINGTON ST. DELAWARE, ON CANADA, N0L 1E0

-----  
Date: Wed, 31 Dec 1997 13:20:10 -0800 (PST)  
From: Doug Faunt N6TQS +1-510-655-8604 <faunt@netcom.com>  
To: qrp-l@Lehigh.EDU  
Subject: [34154] Cascade kit, with KC2 and Buzznot, for sale.  
Message-ID: <199712312120.NAA03012@netcom10.netcom.com>

I have a Cascade kit here that I'm not ever going to build. Apparently I paid \$218 for the Cascade, \$75. for the KC2, and \$19. for the Buzznot. I'd like to get that back out of the set, and prefer to deliver it to someone at the NorCal meeting in January.

Is there anybody interested?

73, doug



-----  
Date: Wed, 31 Dec 1997 15:24:58 -0600  
From: Tim Ahrens <tahrens@inetport.com>  
To: qrp-1@Lehigh.EDU  
Subject: [34155] SGC-2020 News  
Message-ID: <199712312127.PAA06566@admin.inetport.com>  
MIME-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: quoted-printable

Looks like the 'portable' package is now fully described.

I smell a thread coming on! hehe

Happy New Year everyone... may your  
year be filled with happiness, and lots'a  
FOX pelts!!

cuall

Tim W5FN=

-----  
Date: Wed, 31 Dec 1997 16:22:16 -0500  
From: "Bob Kellogg" <ae4ic@nr.infi.net>  
To: <ccart@dns.vidtel.com>  
Cc: "qrpforum" <qrp-1@Lehigh.EDU>  
Subject: [34156] Re: Knightlite SMiTe, Pixie/49'er and SNOW  
Message-ID: <199712312138.QAA16008@mailhost.infi.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=ISO-8859-1  
Content-Transfer-Encoding: 7bit

Hi Chris,

I must report that SMiTe boards still have not been ordered. The final board design was to come to me for ordering. The board designer left for the holidays (won't be back until Jan 6th). Unfortunately, there was a glitch and I didn't get the final design. The changes are minor, and I've been torn between ordering as is and waiting. The final design is more flexible and will allow some parts size substitution, so it's probably better to wait.

In the meantime, we have built a couple more Knightlite SMiTes using routed boards. The circuit design is final and working well. The first ever SMiTe to SMiTe contact occurred during the Pixie/40-9er contest.

Support for this project has been tremendous. I'm holding checks for about 80 of the 100 planned kits. Hopefully, orders will be shipping before the end of January.

Sorry, no assembled kits :-)) -- but this will be a one evening project for most hams.

CUL,  
Bob Kellogg, AE4IC, Greensboro, NC  
Prolably, but not nececelery. -- Benny Hill

-----  
> Bob, any update on the SMiTe's? I'm not rushing you (still didn't get  
> through the "pile" of kits yet) but, how's it going? How many are on  
> order? What's the price for an assembled kit <grin>.

-----  
Date: Wed, 31 Dec 1997 16:35:16 -0500  
From: "Buck, Preston D" <BuckPD@corning.com>  
To: "'qrp-1@Lehigh.EDU'" <qrp-1@Lehigh.EDU>  
Subject: [34157] FOX: N0GLM report  
Message-ID: <6B137F61081DD0118DF600805FEAC5C588C013@SILVER.CORNING.COM>  
Mime-Version: 1.0  
Content-Type: text/plain  
Content-Transfer-Encoding: 7BIT

Greetings All,

It was a good night for being the fox. The BC QRM was minimal at my end and the band was open. Unfortunately it was only open to the south and east of me. The log is as follows with comment after that

|        |     |         |      |     |                   |
|--------|-----|---------|------|-----|-------------------|
| VE3ELA | 459 | 559(me) | Ken  | Ont | (First VE ever!!) |
| WA1QXM | 569 | 569     | Joel | MA  |                   |
| N1TPR  |     | 559     | 569  | Tom | FL                |
| N3ZPQ  |     | 559     |      |     |                   |
| KF4JSV | 599 | 539     | Jeff | VA  |                   |
| G3LAZ  |     | 559     | 599  | Rob | LONDON!!!!!!      |
| WD3KGO | 448 |         |      |     |                   |
| KL7CC  |     | 338     | 579  | Jim | AK                |

VE2TAW 599 559 Tony Quebec  
KB9GEG 559 559 John IL

N3ZPQ & WD3KGO both mentioned QRM at their locations and we couldn't complete the QSO.

It was a great to start off the evening with my first Canadian QSO!!!  
Thanks Ken.

KF4JSV was coming in really well but I had to ask for a few fills because J's and V's still throw me for a loop. Following our QSO somebody started transmitting close enough to block everything out. I hear some QSY in his direction but either he didn't hear it or chose to ignore it. I saw that I couldn't win this one so I sent "FOX QSY UP" and moved up. Is there a better way to handle this?

I moved up 1 kHz and Rob (G3LAZ) greeted me right away. YIPEEE!!! I about choked when I heard the G callsign. Actually I did and missed the numeral entirely. A bit of buck fever I guess. That is my first ever contact with the UK. Even when I was in Germany (ex DA1TT) I couldn't connect with Britain with 100 W. The QRP-L distance from London to Long Island (about 4 hours away but KF2PH is the only callsign I can remember. Thanks Nick.) is 5332 miles so I got more than 1066 miles/watt. I didn't get all of Rob's comments after the exchange because I was a bit (a big big) excited and somebody decided to test out their V transmitter. Just a series of V's followed by a K and at 20db over as well.

KL7CC was confusing to me. His signal was weak but the tone was very raspy. I got the exchange but wasn't sure of the name so asked for a fill but never got any response. I opened up the filters to hear more and a strong station about 400 Hz away was sending KL7CC. His speed was such that I couldn't make out what he was saying. I suspect that he was in QSO with KL7CC and the KL station fell on the edge of my passband. So, while listening for weak stations, I "heard" and responded to someone elses QSO. If anybody can shed light on this I would appreciate it. I pieced the name together later. Knowing how I am with J and V, translating VIM to Jim was pretty obvious.

Followed by another Canadian. My boss is from Canada, so I will always make sure he knows about my VE contacts.

KB9GEG mentioned QRM on his end but I couldn't hear it. Following my QSO with John, the band seemed to die (0114 UTC). I called CQ a few times with no detectable response, then drifted down to 7.122 MHz (Pixie freq?). There were only two QSOs I could hear on the band so I stopped around 0230 UTC.

Overall it was a good evening for me. I can detect improvement in my numbers, especially 5 and 9 :-).

I would like to take a moment to say thanks to Chuck for starting the hunt and for the rest of the list for participating. I have operated more HF the last two months than I have since I was licensed in 1984, am overcoming my fear of the code, built a radio (SW40), bought new antennas and generally had a lot of fun. Thanks very much.

See you next year.

Preston, n0glm

-----  
Date: Wed, 31 Dec 1997 14:11:34 -0800  
From: Gardner / Maguire <bagardn@ibm.net>  
To: daniel@pandora.lugs.org.sg  
Cc: qrp-1@Lehigh.EDU  
Subject: [34158] Re: 1/2-wave dipole --- 50ohm feed  
Message-ID: <34AAC316.597B@ibm.net>  
MIME-Version: 1.0  
Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

Daniel,  
In addition to the good advice from Howard, N3FEL, another way to handle the problem is to just ignore it. (That particular problem solving paradigm is used quite a lot in my shack!)

To give an example, a 100 foot length of RG-8X terminated in a load of  $75+j0$  ohms would have an SWR at the load (antenna) of 1.44 and an SWR at the input (shack) of 1.36. At 7.040 MHz, the loss in 100 feet of this coax would be 0.739 dB with a "perfect" SWR of 1.0 (called the matched line loss). The additional loss due to the SWR of 1.44 in this example is only 0.053 dB. Since 1 dB is a "just discernible" amount, the extra 0.053 dB loss isn't going to make any difference. Put another way, if you (in 9V land) can't hear the fox with an SWR of 1.44 on your line, you're not going to start collecting pelts even with a perfect SWR of 1.0, unless of course you're using the "K1MG Magical Dummy Load Fox Nabber (TM)" [with apologies to Joe for name infringement] for an antenna. (Also please note that these loss figures apply at 7.040 MHz. If you're trying to work up at some of the frequencies where folks like Zack hang out, the additional loss due to a 1.44 SWR would still be small compared to the total line loss, but then you probably would not be using 100 feet of RG-8X up there anyway.)

On transmit, 5 watts in to this 100 foot line example would give you 4.22 watts at the antenna with a perfect SWR of 1.0, and 4.17 watts at the antenna with an SWR of 1.44. Now even though 50 milliwatts may seem like a lot to the real QRPppp boys, a -difference- of 50 milliwatts in a 4 watt signal can be ignored for all practical purposes.

(I used my ZIZL program to do all the number crunching on this example. ZIZL and a few other utility programs (all as BAS source code) are free for the asking. Just drop me a note and I'll send 'em to you as an email attachment ZIP file.)

73

Dan AC6LA

-----  
Date: Wed, 31 Dec 1997 17:09:58 EST  
From: k7sz@juno.com  
To: qrp-1@Lehigh.EDU, qrp@qth.net  
Subject: [34159] FS: T-T/MFJ Tuners  
Message-ID: <19971231.231137.6591.0.k7sz@juno.com>

A friend of mine who is not on internet asked me to post these two pieces:

Ten-Tec Model 277 antenna tuner w/swr. Handles coax, balanced line and wire antennas. Condx: vy gd. \$50

MFJ Model 969 Roller Inductor antenna tuner w/ x-needle swr. Built in dummy load and coax switch. Handles coax, balanced line and wire antennas. Condx: exc. \$125

If anyone is interested, please e-mail me privately and I will forward the information.

-----  
Date: Wed, 31 Dec 1997 17:18:36 -0500  
From: John Levreault <jlevro@shore.net>  
To: microres@crl.com, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>  
Subject: [34160] Re: Rx Mixers Query  
Message-ID: <3.0.3.32.19971231171836.009daab0@shell11.shore.net>  
Mime-Version: 1.0  
Content-Type: text/plain; charset="us-ascii"

At 09:28 AM 12/31/97 -0800, Stanley Wilson wrote:

>Active vs. Passive

>

>I seem to remember in KK7B's articles on the T2/R2 using the SBL that the  
>end result was a very high noise figure. I would think that an active  
>mixer would not have the same problem. ?

>

>

Towards the end of the original R1 article, "High-Performance  
Direct-Conversion Receivers", (QST 8/92 or \_QRP Power\_, p. 4-27) KK7B  
discusses his disappointing noise figure measurements. He attributes the  
18dB noise figure of his R1 on 40M to 1/f noise in the mixer. He quoted  
from the Merrimac catalog:

"The noise introduced by the mixer consists of the conversion loss (SSB),  
thermal noise in the series resistance of the diodes and other components,  
and the 1/f noise figure produced by the Schottky Barrier diodes which is  
only appreciable below 10kHz."

He further quotes from an HP publication that, "Even the best diodes have  
14dB more noise at 100Hz than at 20kHz."

Therefore, if you're doing a direct conversion receiver and an 18dB noise  
figure bothers you, which it shouldn't on 40, 80, or 160, and maybe not on  
30 or 20M, use a preamp. If it's a superhet, then the excess diode noise  
shouldn't be a problem.

72 de NB1I

John Leveault

-----  
Date: Wed, 31 Dec 1997 22:32:12 -5  
From: "Bill Kelsey - N8ET - Kanga US" <kanga@mail.bright.net>  
To: qrp-l@Lehigh.EDU  
Subject: [34161] CD, SPRAT Group buy update  
Message-ID: <199712312236.RAA28301@sparticus.bright.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

I would like to get my orders in this coming week for the ARRL CD's  
and SPRAT Reprints.

A reminder to those of you that ordered the QST CD's - there are now

8 available going all the way back to 1950.

If you are planning on sending an order via US mail - please let me know via e-mail so I can factor that into the order to ARRL and to the Printer for SPRAT.

Hope to hear from some more of you over the next 4 days!

If you missed the initial info on the group buys - it is on my web page - URL below. SPRAT Reprints for SPRAT's # 1 to 91, ARRL QST CD'd, Handbook CD, Amateur Radio Designer software, and QRP Power (the book) are available at one time only prices....

73 - Bill - N8ET  
Kanga US  
kanga@mail.bright.net  
<http://www.bright.net/~kanga/>  
419-423-4604

-----  
Date: Wed, 31 Dec 1997 15:38:07 -0600  
From: "Marshall Emm" <mgemm@mtechnologies.com>  
To: cqclist@lists.csn.net, qrp-1@Lehigh.EDU  
Subject: [34162] CQC Summer QSO Party Results  
Message-ID: <199712312242.PAA00765@edison.chisp.net>  
MIME-Version: 1.0  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7BIT

Results have been printed in The Low Down and are also available on the events page of the web site:  
<http://www.mtechnologies.com/cqc>  
There you will see participants comments, and comments from Jim, KG0PP, the contest manager.

Here are the scores.

Don't forget the Winter '98 CQC QSO Party on 2/22/98!

Multi-Band

|                   |             |                      |
|-------------------|-------------|----------------------|
| Al Dawkins        | K0FRP       | 482 46 15 332580     |
| Paul Beckett      | KF7MD/W0CQC | 31 398 41 17 277406  |
| Jim Kirk          | KJ5X        | 416 34 19 269736     |
| Owen 'OJ' Quarles | K10J        | 476 418 37 16 248456 |

|                       |           |                      |
|-----------------------|-----------|----------------------|
| Robert L. Stolzle     | AC5AM     | 292 34 17 169776     |
| Kenneth Newman        | N2CQ      | 466 216 27 18 105976 |
| Bob Kellogg           | AE4IC     | 228 29 15 100180     |
| John T. Laney, III    | K4BAI     | 264 24 15 96040      |
| Floyd Smithberg       | NQ7X      | 242 24 15 88120      |
| Rich High             | W0HEP     | 1 188 24 13 59656    |
| Randy Brace           | XE1/K8ZAA | 463 162 24 15 59320  |
| Jack Dougherty        | WA8GHZ    | 168 16 13 35944      |
| Gary Lindeman         | N40LN     | 124 20 14 35720      |
| Wayne Baggott         | KA10X     | 136 16 14 31464      |
| Walt Amos             | K8CV      | 144 13 14 26208      |
| Joel Malman           | WA1QVM    | 78 16 15 19720       |
| Charles "Doug" Wilson | K6RPN     | 112 13 12 18472      |
| Jerry Gorrell         | W0CLR     | 110 12 12 16840      |
| Dave Perry            | N0IBT     | 16 106 16 9 15264    |
| Ken Anderson          | KA3WMJ    | 353 72 10 8 6760     |
| John Shannon          | K3WWP     | 74 10 7 6180         |
| Jan Medley            | KB0WQT    | 60 9 10 5400         |
| Cameron Bailey        | KT3A      | 479 50 8 8 4200      |
| Brad Mugleston        | KB0ROL    | 42 4 6 2008          |

#### Single Band

|                 |        |                    |
|-----------------|--------|--------------------|
| Bob Patten      | N4BP   | 378 30 17 193780   |
| Brian D. Kassel | W5VBO  | 172 26 15 68080    |
| Stephen Stuntz  | N0BF   | 18 152 20 13 39520 |
| Les Shattuck    | K4NK   | 158 16 14 36392    |
| Rob Heiss       | K06KA  | 462 66 10 12 7920  |
| Tim Pettibone   | K5OI   | 48 10 7 3360       |
| Marshall Emm    | N1FN/2 | 154 50 6 7 3100    |
| Jim Francoeur   | KC1FB  | 355 26 3 5 1390    |
| Bill Denton     | W5SB   | check log          |

-----

Date: Wed, 31 Dec 1997 17:45:38 -0500 (EST)  
 From: "L. Jeffrey Hetherington" <jhetheri@freenet.npiec.on.ca>  
 To: Multiple Recipients of List <qrp-l@Lehigh.EDU>  
 Subject: [34163] MFJ CWF-3 Schematic Wanted  
 Message-ID: <Pine.A41.3.96.971231174301.30284A-1000000@NiagaraNet.npiec.on.ca>  
 MIME-Version: 1.0  
 Content-Type: TEXT/PLAIN; charset=US-ASCII

Hello All!



I hope somebody can help me. I am looking for the schematic for the MFJ CWF-3. Since MFJ no longer makes this little fellow, they no longer have the schematic in their current file. They are going to check their archives to see if they have kept a copy of this particular schematic.

If there is anybody on the list that has a copy, or can make me a copy I would gladly send an SASE and cover any expenses.

Thanx.

Jeff - VA3JFF

=====

L. JEFFREY HETHERINGTON VA3JFF  
Canadian QRP Award: <http://www.geocities.com/Colosseum/2572/QRP.html>

-----

Date: 31 Dec 1997 17:41:02 -0500  
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>  
To: qrp-l;;  
Subject: [34164] Re: Rx Mixers Query  
Message-ID: <1997Dec31.174102-0500@[130.113.234.7]>

John and gang,

Let's get the R1/R2 thing straightened out before this thread get's too tangled.

In a subsequent article in QST "Technical Correspondence" KK7B corrected himself, regarding diode noise in the ring mixers he used. He had neglected to terminate the audio preamp with a 50 ohm source resistance when measuring its noise. This resulted in inflated noise that he attributed to the mixing diodes.

Turns out that the mixer was well-behaved as far as noise. A major source of noise in the R2 is the op-amp phase shifters. More audio preamp gain was the suggested fix.

I'd say that the 1/F noise is isolated from the audio amp in his direct conversion receiver. Any diode noise at 7 Mhz. might be converted down to audio, but that's pretty small.

In <3.0.3.32.19971231171836.009daab0@shell1.shore.net>, John Levreault wrote:

>Towards the end of the original R1 article, "High-Performance  
>Direct-Conversion Receivers", (QST 8/92 or \_QRP Power\_, p. 4-27) KK7B  
>discusses his disappointing noise figure measurements. He attributes the  
>18dB noise figure of his R1 on 40M to 1/f noise in the mixer. He quoted  
>from the Merrimac catalog:  
>

>"The noise introduced by the mixer consists of the conversion loss (SSB),  
>thermal noise in the series resistance of the diodes and other components,  
>and the 1/f noise figure produced by the Schottky Barrier diodes which is  
>only appreciable below 10kHz."

>

>He further quotes from an HP publication that, "Even the best diodes have  
>14dB more noise at 100Hz than at 20kHz."

-----  
Date: Wed, 31 Dec 1997 17:43:41 EST  
From: K5BDZ <K5BDZ@aol.com>  
To: D2250077@infotrade.co.uk, qrp-1@Lehigh.EDU  
Subject: [34165] Re: Rx Mixers Query  
Message-ID: <a859eb06.34aaca0@aol.com>  
Content-type: text/plain; charset=US-ASCII  
Content-transfer-encoding: 7bit

John

I still say go with the SBL-1. I used that in the Backpacker I and II  
transceivers made by Tejas Kits and it was so quietk, one of the kit builders  
still calls it"the most transparent receiver" he has ever heard!!!  
Disconnect the antenna and no sound! It's as if the rig power was turned off!  
This was a DC receiver with much gain after the SBL-1 (or it's little twin the  
TUF-1).

Also on tuned inputs, my favorite by far !!! is the HIGH Q series L/C circuit  
with the capacitor a trim cap to peak received frequency. Takeoff from low  
pass filter (50 ohm) and feed into the SBL-1 (50 ohm). the high Q circuit on  
the scope looks like a peaked CW filter -narrow- and the unwanted signals  
really drop steeply off both sides.

Good luck to you and to all who try this by constructing and testing (thus  
proving) as opposed to critiquing it with theory only.

Bill, K5BDZ

-----  
Date: Wed, 31 Dec 1997 18:22:48 -0500  
From: VE3JC John <jbcumming@wwdc.com>  
To: kayser@rideau.net  
Cc: qrp-1@Lehigh.EDU  
Subject: [34166] "QRP: what does it mean to the CW Op?"  
Message-ID: <34AAD3C8.6C28@wwdc.com>  
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii  
Content-Transfer-Encoding: 7bit

To Larry Kayser VA3LK,  
Editor of "CW Today" in "The Canadian Amateur"

Hi Larry.

Let me commend you on your excellent "CW Today . . ." column. I think it will do a lot to help keep CW as an exciting and dynamic operating mode among Canadian Amateurs.

In your December issue you discussed "QRP: What does it mean to the CW op?". You made several comments with which I do not agree. Let me first mention that, as a ham licensed for 20 years, I now spend about 95% of my operating time on CW, and about 98% at QRP power levels.

You state "...the cliché of 'any road will get you there when you are not sure where you are going' applies to a lot of the QRP operation that I observe." If I interpret you correctly, you're suggesting that QRP is OK, as long as you don't have any specific operating goals or objectives in mind. On the contrary, as much as DX'ing or contesting, QRP operation is largely driven by establishing objectives and mapping out a course to get there! There are many "destinations" on the QRP map: Awards [QRP WAS, DXCC, "1,000 miles per Watt"], Contests [CQ, ARRL, Canada Day, and dozens of dedicated QRP contests], and home brewing [kits produced by various QRP clubs] to name just a few.

You comment that "QRP will not support daily intercontinental QSO's to the same degree that 100 Watts will." Of course it won't. Neither will 100 Watts to a 40 ft. 3 element yagi support daily intercontinental QSO's to the same extent that a KW signal to stacked monobanders at 90 feet would. The question is, what is "adequate" to achieve the desired communication? As a CW fan, you should recognize that a CW signal has an inherent efficiency advantage over an SSB signal. When fed to the same antenna under identical propagation conditions, a 5W CW signal is easily as effective as a 100 W ssb signal.

Would you suggest to our SSB friends that they should turn up their nose at a 100 W ssb rig and an "average" antenna system if they want to regularly converse with "a widely distributed community of friends"? If you do, you're excluding most of the ham fraternity and sorority !

Does your local radio club ever bring in a high profile dx'er, or a ham with a \$50 k antenna farm to talk about his towers ? While he's speaking, take a look around at the hams in the room. Do their eyes say "This stuff is great, I'm gonna rush right out and pour a concrete base for a tower!" or do they say "if this is what it takes to succeed on HF, I guess I'll give up on the code and stick to my vhf hand held". Most hams don't "choose" to have modest antennas and equipment, the choice is made for them by economic reality.

Larry, I think it's important to excite and inspire hams by showing what can be done with a modest investment of time, real estate,

and money. The fact is, a \$20 dipole and a \$100 QRP rig is sufficient for a great deal of fun and reliable communication. In the past two years, I have had QSO's with every province, territory, and state in Canada and the US at less than 5 watts output and with a very average antenna system. ("2-way QRP" QSO's have been achieved with all except NWT and PEI). I can set up skeds on CW at 5 watts which are sure to be as effective as SSB skeds at 100 Watts. Most QRP'ers are active in building {there are a wealth of transceiver kits available for \$60 to \$150 CDN} and consequently have greater technological depth than those who operate "off the shelf" 100 W rigs.

So to answer your question, "What DOES QRP mean to the CWop?". It means he can get on the air, even if his ham budget is limited to \$100. It means he can go beyond the "run of the mill" QSO and set his sights on more challenging targets. It means he can establish, and maintain regular contact with, a wide circle of friends who share an interest in homebrewing, contesting, and field operation from exotic "near by" locations. And it means he has the capability to maintain hf communication when disaster strikes and the lights are out.

I am attaching a few excerpts from postings to the "QRP-L" internet QRP club. [Larry, these guys are the definitive source for enthusiastic and informative QRP data, if you're ever looking for it!].

Best wishes for 1998, Larry, and good luck with the column! It was great to catch you on 160 M CW during the Canada Winter Contest (QRP, of course!).

Vy 73 de VE3JC      John

-----  
Well Scott, NF3I, once gave a talk on power density. This is a \*gross\* over simplification, but, 5W in 100Hz bandwidth has a "density" of 5W/100Hz, or .050W/Hz. With SSB you would be at 100W/3000Hz or .033W/Hz.

It's not quite that simple but I think you get the idea. The trouble is figuring out the % of power for each frequency in normal speech on SSB and convincing people that CW can use as little as 25-50Hz of bandwidth.

72 es gl

-- Chris Cartwright,    Technical Engineer    |      ccart@vidtel.com

-----  
From:

"Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>

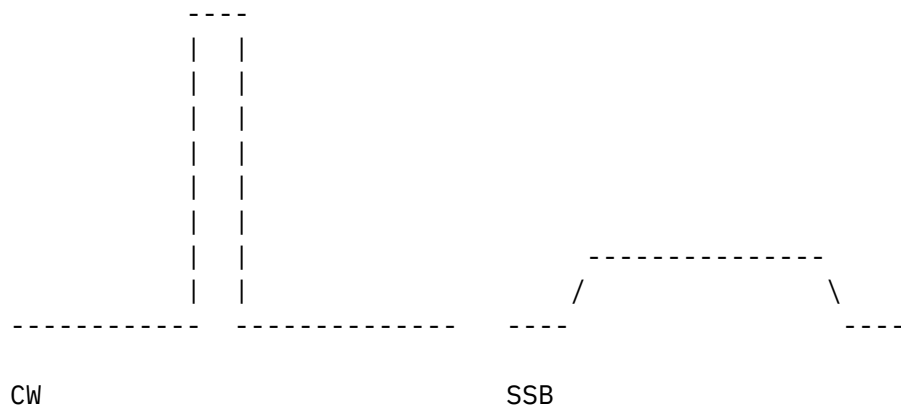
To:

VE3JC John <jbcumming@wwdc.com>

CC:

qrp-l <qrp-l@lehigh.edu>

Think of a receiver as a bucket. IF you spread one "power unit" into a signal over a given frequency range which the receiver is able to "catch," the receiver will catch it. Narrow the bandwidth of the signal, and the receiver will still be able to catch it. Let's look at a power spectral density, in "power units per Hz."



If the receiver receives no noise, and none is generated internally, the two modes work equivalently well.

However, let's now add noise to the picture. What is noise? Anything that is "unwanted," which implies "other than the signal you're trying to receive." It could be a hiss, another nearby signal, a heterodyne, or something internally generated in the mixing stage. At any rate, you generally don't want it.

So now we'll add "noise power" in the receiver's passband in the form of another signal.

What would you do to get rid of it? FILTER! Since CW has a bandwidth of 100 Hz at moderate speeds, you could filter down to 100 Hz bandwidth quite comfortably. Unfortunately, SSB sounds quite awful if filtered to much less than 1.8 kHz.

What if the noise is a broadband noise?





Guess what? the SSB signal is below the noise, and the CW signal isn't.

By how much? Assume 100 Hz for CW, 2 kHz for SSB, and one power unit.  
Power Spectral Density: CW =  $P / 100 \text{ Hz}$  SSB =  $P / 2000 \text{ Hz}$

Gain =  $10 \log \text{CW/SSB} = 10 \log 20 = \text{about } 13 \text{ db.}$

So what does it mean? You can still detect a CW signal 13 db "longer" that you can an SSB signal of equal, total signal power.

Conversely, in order to "give up" this advantage, you'd have to drop your CW signal by 13 db - or a factor of 20 - like from 100 to 5 watts.

In the clear, 100w is 100w. When the chips are down, narrow bandwidth wins. No, I'm not getting into Spread Spectrum debates.

-----  
From: "LLOYD DEEM" <WH6CDU@classic.msn.com>  
Reply-To: WH6CDU@classic.msn.com  
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

"Let's compare a 100-watt signal to a 5-watt one. For example, if the other station gives you a signal report of 20 db or s9 when you are using 100 watts, he should give you a report of 7 db over s9 when you QRP to 5 watts" (W1FB's QRP NOTEBOOK). I think that this says it all power is relevant to antennas used at both ends and the skill of the operator.

73 wh6cdu Lloyd

-----  
Assume you have a constant signal power of "k," in any mode, at the

receiver (the transmitter on the other end puts out a constant power).

Assume you have a noise power that's a constant level "m" at the receiver.

In other words, the same noise level exists at all frequencies within the range you're receiving.

CW: 100 Hz @ 20 wpm. Minimum bandwidth for receiver = 100 Hz.

Signal power = k, noise power =  $m \times 100 \text{ Hz}$

Signal/noise =  $k / 100m$

SSB: 2000-3000 Hz. Minimum practical receiver BW = 2,000 Hz.

Signal power = k, noise power =  $m \times 2000 \text{ Hz}$ .

Signal/noise =  $k / 2000m$

AM: 6000 Hz. Minimum practical receiver BW = 6,000 Hz.

Signal power = k, noise power =  $m \times 6000 \text{ Hz}$ .

Signal/noise =  $k / 6000m$

So what does this mean? Mathematically, through the ability to use progressively narrow filtering at the receiver, you can reduce the amount of noise power entering the receiver's IF stages, making the signal you want to receive stand out from the "other stuff," which we'll call noise.

How much improvement is achievable?

CW vs SSB -  $k/100m$  vs.  $k/2000m$

gain =  $10 \log (P2/P1) = 10 \log 2000/100$

db gain (CW vs. SSB) = 13 db

CW vs AM -  $k/100m$  vs.  $k/6000m$  -

gain =  $10 \log (P2/P1) = 10 \log 6000/100$

db gain (CW vs. AM) = 17 db

(and of course, it's probably higher because 50% of signal is spent in

non-information-bearing carrier)

\* Scott Rosenfeld NF3I Burtonsville, MD

\*\*\*\*\*

VE3JC - JOHN CUMMING

192 WELLINGTON ST. DELAWARE, ON CANADA, N0L 1E0

-----

End of QRP-L Digest 956

\*\*\*\*\*

-----